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ABSTRACT

A K-12 career education project involving thirty-eight school corporations in Southwestern Indiana had several objectives, including developing a concept of career education, developing career education materials, developing a career education model for rural settings, and increasing the utilization of existing school and community resources. The project activities included the following: consultants were assigned to each school, teacher inservice programs and workshops were conducted, mobile units equipped with soft and hard career materials were made available to teachers and students, a resource catalog of career materials was developed, and an infusion manual on implementing career education concepts into the traditional curriculum was developed. As a result of the project, the concept of career education gained acceptance, teachers and students became better informed about career opportunities, a model of career education for rural settings was developed, a secondary school student placement model was developed, teachers were exposed to ways career concepts may be integrated into the subject areas, community resources were identified and utilized, and a large population became acquainted with available career education materials through the mobile units. (The appendix comprises most of this report and includes a newsletter copy, a teaching unit sample, the infusion manual, K-12 performance objectives, the placement model, and the project evaluation report.) (EM)

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FINAL REPORT

Project No. V361182
Grant No. OEG-0-73-5312

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Career Development and Meaningful Exploratory Experiences to Middle School Students in Southern Indiana Utilizing Mobile Design Educational Units

Exemplary Project in Vocational Education
Conducted Under
Part D of Public Law 90-576

The project reported herein was performed pursuant to a grant from the Office of Education, U. S. Department of Health, Education and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

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June 1976

CE 015 996

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
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SUMMARY OF THE REPORT

SUMMARY OF THE REPORT

PERIOD COVERED BY THE REPORT

July 1, 1975 to June 30, 1976

GOALS AND OBJECTIVES OF THE PROJECT

To develop a concept of career education in participating school corporations.

To develop a significant amount of career education materials appropriate to local needs.

To develop a career education model that will fit into the rural setting.

To encourage community involvement which will result in a significant contribution to the educational programs in participating school corporations.

To provide services that will result in greater utilization of existing school and community resources for participating schools.

To assist participating schools in developing joint efforts in supporting career education programs.

To develop an information network for the dissemination of career education materials and related information.

To develop techniques that will establish the accountability of the educational process in helping to equip each individual to shape his future life.

To establish advisory committees to provide the community with support and direction.

To make the project (SCRP) accountable for implementing its goals.

To insure that a significant amount of career education materials will be utilized in each participating school corporation.

PROCEDURES FOLLOWED

One regional orientation meeting was conducted for area superintendents for the purpose of establishing the project's goals and objectives and also for identifying those school corporations interested in participating in the career project.

Once the schools were identified, they were then assigned a consultant.

Each consultant had the responsibility of working with the superintendent and principals of their assigned school corporations in identifying teams of teachers to work with from the middle school and elementary grades, and in some cases, high schools.

Once identifying the teams, the consultants scheduled weekly or monthly workshops in which the teachers were provided with released time or stipends for developing ideas and materials related to career education.

During the remaining months of this fiscal year, each team working with the career staff will continue to develop, implement and refine methods of instruction on the infusion of career education into the traditional curriculum.

A series of films on vocational occupations was assigned to participating schools. These films were shown during and to those students whose teachers were involved in workshop activities.

Two mobile units were equipped with both soft and hard materials and made available to both teachers and students in helping them become acquainted with the types of materials available and their possible utilization.

A resource catalog listing career materials available at the Center and aboard the mobile unit was developed and provided to each school corporation and to all schools within the project area,both public and private.

An infusion manual was developed and provided to each participating teacher as a means of assisting them in the implementation of career education concepts into the traditional curriculum.

Resource directories have been developed as a means of providing community support to the educational program in participating school corporations.

Field trips to local businesses and industry were taken to supplement the learning of students involved in career education activities. Three school corporations were selected to serve as "model" sites for the purpose of determining student career development in grades three, six, nine, and twelve. Pre-testing and post-testing methods of evaluation were applied during the third year of funding in order to determine any change.

RESULTS AND ACCOMPLISHMENTS

As a result of the superintendent's orientation meeting in October, 1974, personal contact, and contact via mail, 38 school corporations indicated an interest in utilizing the services and materials of the project. Through in-service activities, teachers as well as students, have become better informed as to the career opportunities available to them in their respective communities and have observed firsthand, workers functioning in their roles.

Through the workshops, teachers have been exposed to the variety of ways career related concepts may be integrated into the subject areas.

As a result of the mobile units, a large population has become acquainted with the variety of resource materials available in the area of career education.

Conducting regional workshops has localized program development and has enabled career teams to identify and utilize community resources.

Utilizing community personnel in program development has increased the community's awareness of career education and its many merits.

As a result of career related activities in the classroom, students are more aware of the academic preparation necessary in pursuing a career of their interest.

Through in-service activities, teachers have experienced the techniques involved in unit writing and curriculum development (infusion).

EVALUATION

During the three year period site-evaluations of the project were conducted by the following: Mr. Robert Hewlett and Mr. Chuck Jaymes, Program Officers, Vocational-Technical Education, U.S. Office of Education, Region V; Mr. Jerry Keiser and Ms. Kim Powers, Coordinators of Career Exploration and Guidance, Indiana State Department of Public Instruction; and Mr. Tom White, Associate Professor of Education, Indiana University. Third party evaluation was done by New Educational Directions of Crawfordsville, Indiana.

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

The concept of career education gained the acceptance of educators in Southwestern Indiana.

The CRP staff was exposed to additional career education in-service training during the period of October, 1974, through April, 1976.

The CRP staff assured participating schools that once federal funding was terminated, career education services would continue to be made available. The Careers Resource Project gained fourth year funding (1976-1977) made possible by the Indiana State Board of Vocational and Technical Education.

Parents should be made more aware of the importance of career education.

A systematic check out procedure was devised for loan of career education materials.

All educators who have utilized the services of the mobile units have expressed total satisfaction.

A model of how career education will fit into the rural setting resulted from this project.

A Comprehensive Placement Model for use by secondary schools resulted from this project.

It is recommended that the "infusion" approach to career education be employed whenever possible rather than the separate course approach.

Although only a minority of the faculty may get involved in career education activities initially, this should pose no real obstacle to the total success of the school's effort. It is best not to force those teachers who do not want to participate.

A large amount of locally prepared handout material was assembled by CRP staff for use in teacher in-service sessions.

BODY OF THE REPORT

INTRODUCTORY STATEMENT

With the career education concept being brought to Southern Indiana, school personnel in the counties involved are being brought together for a reason other than social or sporting events. Career education can be of mutual benefit to all and bring about closer working relationships.

As a result, we have discovered that, for the most part, this concept can change attitudes of educators and that career education can bring relevancy to education. We are seeing that career education is rapidly growing from concept to reality.

PROBLEM AREA OF THE PROJECT

The project is serving a 16 county area in Southwestern Indiana. The socio-economic nature of the 16 county area covered by the project has several distinct characteristics. The counties covered represent the lowest average per capita income in the State of Indiana. Many of the young people are unaccountable on census data and school enrollments due to migration between Indiana and Kentucky. It has been analyzed that some individuals in this area are as culturally deprived as those in the urban ghettos. Many of the areas have been classified as economically deprived and qualify for Title I assistance.

The major features of the economy are based on agriculture and small industry. Many of the available jobs are classified as semi-skilled occupations. Manufacturing relates to furniture, boat building, engine rebuilding and governmental operations in the area. Public service, recreations, business and distribution are representative of other occupations. There are also many individuals traveling to Evansville, New Albany, Jeffersonville Louisville, Vincennes, and Bedford for employment.

The 38 school corporations representing the area of the project if compared with the rest of the state show:

1. The average assessed valuation of the state is $10,720 compared to $8,773 average assessed valuation of the 38 school corporations.
2. The average assessed valuation of the 38 school corporations would rank 188 of 318 school corporations in the state.
3. The average rank of school populations of the 38 school corporations is 157 of 318 school corporations.
4. Enrollment of the thirty-eight school corporations in Southwestern Indiana total 116,370 students, which represents 9% of Indiana's school enrollment.

5. The thirty-eight school corporations represent 11% of school corporations in the State of Indiana.
6. For purposes of comparison, statistics show that 35% of the state's enrollment is found in 15 school corporations.

GOALS AND OBJECTIVES OF THE PROJECT

I. IT IS EXPECTED THAT A CONCEPT OF CAREER EDUCATION WILL BE IMPLEMENTED IN PARTICIPATING MODEL SCHOOLS. THE CRP WILL:

A. Provide in-service programs and career development to teachers in participating model schools.

B. Be involved in program development and implementation with representative aspects of communities served by participating model schools.

C. Apply a three-phase approach to providing career information to the participating model schools.
  1. In-Service Training for Teachers and Administrators
  2. Classroom Implementation
  3. Evaluation

D. Assist in designing particular career education programs and activities for specific teacher needs as they fit in the sequence of instruction.

E. Make available career education-oriented materials and equipment to model schools on a loan basis.

F. Assist participating model school corporations in the collection and development of their own career education materials by utilizing community resources.

II. A MODEL OF HOW CAREER EDUCATION WILL FIT INTO THE RURAL SETTING (K-12) WILL RESULT FROM THIS PROJECT. THE CRP WILL:

A. Develop plans and strategies for expanding the program to all levels (K-12) in a rural setting by developing models for town, corporation (school district), and county organizations.

B. Utilize regional and local mass media to further community understanding of career education activities.

C. Assist in fostering, wherever possible, increased understanding and cooperation between school agencies and community resources such as PTA, labor, Chamber of Commerce, etc.

III. PROJECT SERVICES WILL RESULT IN A GREATER UTILIZATION OF EXISTING SCHOOL AND COMMUNITY RESOURCES FOR PARTICIPATING MODEL SCHOOLS. THE CRP WILL:

A. Where feasible, assist participating schools in the establishment of a career education advisory committee made up of representatives from school, community, business, and industry.

IV. THROUGH STATE AND LOCAL EFFORTS, PARTICIPATING MODEL SCHOOLS WILL DEVELOP STRATEGIES TO SUPPORT AND CONTINUE CAREER EDUCATION PROGRAMS. THE CRP WILL:

A. Facilitate the exchange of teacher-developed materials (units, etc.) among schools.

B. Encourage joint participation in in-service (i.e., regional in-service meetings).

C. Utilize school personnel who have been engaged in career education programs for in-service activities.

V. AN INFORMATION NETWORK WILL BE DEVELOPED FOR THE DISSEMINATION OF CAREER EDUCATION MATERIALS AND RELATED INFORMATION. THE CRP WILL:

A. Provide career education-oriented materials and equipment, on a loan basis, to participating model schools.

B. Maintain a public relations program to include local news releases, brochures, and a center newsletter.

C. Encourage each participating model school or corporation to appoint a liaison person who will be responsible to coordinate the local efforts with the project.

VI. AN INCREASE IN CAREER AWARENESS AND KNOWLEDGE AMONG STUDENTS IN THE MODEL SCHOOLS WILL RESULT FROM EXPOSURE TO LOCAL CAREER EDUCATION PROGRAMS.

A. Model schools representative of the project area will be selected for evaluation of student change.

B. Assessment will be made at selected grade levels in model schools.

C. While maintaining services to currently participating school corporations, intensified concentration of regional consulting services will be effected on a team approach basis in model schools.

D. A systematic articulated K-12 curriculum approach will be effected in model schools so as to provide students with similar career education treatments.

E. A control population for model schools, if possible, will be selected as part of the evaluation design.

F. Experimental and control populations will be informed of the results of evaluation activities on a regular basis.

G. Specific information (student data) will be gathered to show changes in achievement, attendance, values, etc., with the assistance of school administrators and teachers.

VII. COMMUNITY SUPPORT AND DIRECTION WILL BE PROVIDED TO THE PROJECT BY AN ADVISORY COMMITTEE. THE CRP WILL:

A. Establish an advisory committee of representatives of the participating model schools to offer advice and counsel to the project. Schools other than model schools may have representative membership.

VIII. PROJECT WILL BE ACCOUNTABLE FOR IMPLEMENTING ITS GOALS.

A. Accountability will be established through internal auditing and the third party evaluation focusing on outcome objectives I-VII and their related process objectives.

IX. THE PROJECT WILL APPLY THE ABOVE GOALS AND OBJECTIVES TO SCHOOLS OTHER THAN THE MODEL SCHOOLS WHERE SERVICES ARE REQUESTED AND WHERE THESE SERVICES ARE ECONOMICALLY FEASIBLE.

DESCRIPTION OF THE GENERAL PROJECT DESIGN

The project was administered under a Project Director who was responsible to the State Director of Vocational Education and the State Board of Vocational and Technical Education. Project staff included five career education consultants, one audio-visual consultant, one materials development technician, and three secretaries. Consultative services and lecturers were available. The staff worked with 38 school corporations involved in the 16-county area.

A career education advisory council was created to help establish direction and ideas for the project. Individuals from the community, business, and industry were involved in presentations, advisory committee functions, and providing resources to the operation of the project.

The primary mission of the project was to initiate career education programs (K-12) in southern Indiana upon the completion of the three-year period. The level to which the project entered the school systems during the first year was through junior high programs. The next year the target groups broadened to include elementary and secondary levels. In-service education continued to be a part of the total project. However, it should be emphasized that the project focused on implementing career development and meaningful exploratory experiences for the students in southern Indiana.

Upon completion of the project, it is expected that a concept of career education will be implemented in each school corporation. A significant amount of career education materials will have been developed and will be utilized in each school corporation. Students served by the project will have had an opportunity to acquire a knowledge about themselves as related to their abilities, needs and aspirations. The students will have received many experiences about the world outside a school. A model of how career education will fit into the rural setting will result from this project. Involvement of all aspects of the specific communities of each school corporation will result in a significant contribution to the educational system.

Enrollment of the 38 school corporations in Southwestern Indiana total 116,370 students, which represents nine percent of Indiana's school enrollment. The average rank of school populations of the 38 corporations is 157th of the 318 school corporations in the state.

RESULTS AND ACCOMPLISHMENTS OF THE PROJECT

SIGNIFICANT ACTIVITIES

As stated before and also pointed out in many cases by the third party evaluator, the following results and accomplishments were obtained during the three year funding life of the project.

Media consultants attended the Instructional Development Institute held at the Four Winds Motel, Smithville, Indiana, on August 4-7, 1974. Also attended a media in-service training program held at the Executive Inn, Evansville, Indiana, on September 18, 1974.

Established graduate credit programs with local institutions of higher learning whereas teachers could gain graduate credit through career education units in the classroom. Those participating institutions were the University of Evansville, Indiana, and Indiana State University at Terre Haute, Indiana.

A new public relations brochure was printed describing our project goals, objectives, services, etc.

The project staff previewed, evaluated, and purchased much software to be used by the consultants and placed on loan to participating schools in the project area. These new materials pertain to level K-5, 6-8, and 9-12.

The CRP staff visited the Indiana Careers Resource Center, 1201-09 South Greenlawn Avenue, South Bend, Indiana, on September 11-12, 1974, for the purpose of in-service training.

The CRP staff attended an in-service workshop (career education unit writing) in Indianapolis, Indiana, on September 17-18, 1974.

The director attended the Management Seminar for Project Directors, Region V in Chicago on September 19-20, 1974.

New staff personnel received between 50 and 60 hours of in-house in-service training through direct observation, professional reading, and viewing career education film literature.

Consultants made appearances at PTA meetings and other various civic organizations during the three year period.

A procedure for reimbursement for release time to teachers participating in career education planning activities was developed and distributed to school personnel in each participating corporation, 1974-1976.

We utilized the resource of Counselor Films, Inc., Career Futures, Inc., 2100 Locust Street, Philadelphia, Pennsylvania. These films are vocational and career related, December, 1974.

Summer workshops were conducted at:
(1) Crawford County Community School Corporation
(2) Orleans Community Schools
(3) North Central Community School Corporation
(4) Southwest Dubois County School Corporation
(5) Salem Community Schools
(6) Tell City-Troy Township Schools
(7) Forest Park High School
(8) Greater Jasper Consolidated School Corporation
(9) Vincennes Community Schools
(10) Pike County School Corporation

The Careers Resource Project's materials catalog was finalized on October 8, 1974. Over 300 of these catalogs were disseminated to project area schools on November 4. This 100-page plus catalog lists career audio-visual materials (other than films); career audio-visual kits or teaching units; career cassette kits or teaching units; career filmstrip kits or teaching units; and a listing of miscellaneous career education materials and occupational related films.

A congruent plan for implementation of career education in grades K-12 (infusion approach) was developed and made available to educators in the project area on October 22, 1974, with emphasis being placed on grades K-5. (See Appendix C)

The purchase of a second mobile unit was finalized on October 9 and was made operational to school corporations on October 24, 1974.

The Careers Resource Project, personnel and equipment, participated in the regional-wide teachers' institute in Evansville, Indiana, on October 24-25, 1974. Approximately 1400 area teachers and administrators attended these institutes (public and parochial).

Director attended a meeting at the University of Evansville on October 29, 1974, with other interested parties who were involved with career related activities, i.e., CVIS, business education and guidance personnel.

Involvement of military personnel as guest speakers to project area schools occurred as scheduled with emphasis being placed on careers in the military service--not recruitment.

Graduate credit in career education was gained by teachers in Southwestern Indiana (Rivet High School) under the auspices of the University of Evansville along with staff support from the Careers Resource Project, November 27, 1974.

The Southwestern Indiana Careers Resource Project Advisory Committee was formed. The committee was composed of 16-20 members representing a cross-section of people in education, community, business and industry, December, 1974.

Educators in the project area utilized the services of the materials center. Hundreds of items including audio-visual kits, career education games, filmstrips, books, and other career-related materials were placed in circulation.

The third party evaluation team initiated the interviewing of teachers for the purpose of assessing their knowledge and attitude toward career education in December, 1974.

The director and third party evaluator attended the national meeting for administrators of Part C and Part D programs held in Dallas, Texas, during the period of January 28-30, 1975.

All Careers Resource Project staff members, third party evaluator, and the Coordinator of Career Exploration and Guidance for the State of Indiana attended a two-day workshop at the Canyon Inn, McCormick's Creek State Park, March 6-7, 1975. This meeting laid groundwork for project modification which identified three model schools representing county, town, and corporation (district).

Both career education mobile units were used almost daily by project area schools during period October 25, 1974, through May 15, 1976.

Numerous articles have appeared in local newspapers illustrating in-service, classroom, and field trip activities resulting from project involvement, 1973-1976.

Television stations that cover the project area (WEHT, WTVW, Evansville; WAVE, Louisville; and WTTV, Bloomington) have periodically ran spots reflecting support for career education in schools, 1973-1976.

The project sent one consultant to the Career Education Spring Institute held in Nashville, Tennessee, April 7-9, 1975.

The Southwestern Indiana Careers Resource Project Advisory Committee met on April 11, 1975, and again on November 6, 1975. Leaders representing business, industry, government service, and education were in attendance.

The HEW on-site evaluations were conducted by Region V, third-party evaluator, and State personnel on May 15-16, 1975, and again on February 11-12, 1976.

Due to the large area for which the project was initially responsible, the modification of the original proposal was necessary in order to have any chance to reflect student change in the form of measurable results. The changes were required in an effort to follow federal guidelines, June, 1975. The Career Education Project, through the employment of individuals specialized in career development techniques, provided assistance in development of a comprehensive program in career education in three school corporations. It was noted, however, in order to maintain credibility with other schools presently participating with the CRP, they were still to receive the services of the project as time and money allowed. The three school corporations selected for the purpose of this research were West Washington School Corporation, Warrick County School Corporation, and North Lawrence Community School Corporation. The findings of this research are documented in Appendix G.

The director met with State career education project directors and Department of Public Instruction consultants in Indianapolis, Indiana, July 18, 1975, for the purpose of becoming aware of other career education projects and to share information which would expedite the coordination of efforts in our state presently and in the future.

The CRP supported the Summer Recreational Program for the Economically Disadvantaged Youth (S.P.E.D.Y.), a federally funded Manpower program, in southwestern Indiana. A total of ten counties (800 students, ages 14-21) utilized the project's career materials during the months of July and August, 1975.

The project cooperated with the Monroe County Public Library in making available career education books, kits, films, CRP brochures, and other related items in observance of International Women's Year celebration, Bloomington, Indiana, on September 26-27, 1975. A booth displaying the materials was established and maintained by CRP personnel.

A news article entitled Career Education for Children in Southwestern Indiana, written by the project director, was sent to 43 newspapers in the service area on August 5, 1975.

The director met with 23 school superintendents for the purpose of assuring each of continued services that were to be made available by the project for the school year 1975-1976. Also to inform the administrators of the status and future of career education in Indiana, September 4, 1975.

The director met with the State Coordinator of Career Exploration and Guidance and Director of the Indiana Career Resource Center for the purpose of planning for fourth year funding, November 13, 1975.

The CRP participated in the Southern Indiana Career Education Conference on November 19, 1975, at French Lick, Indiana. The project was responsible for providing a mobile unit and an interest session on The Use of Graphics in Career Education.

The four-hour video-tape presentation for the purpose of identifying major industries (employers) in the project area has been completed. This presentation is to be used for in-service training of teachers and administrators with the intent of creating an awareness of the type of jobs available in their community that their students may reflect an interest. Discusses worker role and function, training and educational requirements, working conditions, and various other aspects of jobs, November, 1975.

The Director attended the newly founded state-wide career education advisory committee. The Director presented a briefing on the role and function of the CRP. Newsletters and project brochures were distributed to committee in person on October 16.

The CRP staff conducted in-service activities for Indiana State Teachers Association (ISTA - regional sites) at Indianapolis, Evansville, and Jasper on October 23-24. Approximately 75 educators from across the state requested a copy of our materials catalog and infusion manual. These materials were mailed on December 18, 1975.

The project provided a "package" of relevent career education materials and references to the Career Education Televised Seminar Series (CETSS at the University of Evansville). These materials will further enhance the degree of career education awareness and increase the momentum of career education in Southwestern Indiana--potentially state and/or nationwide, December 18, 1975.

The director attended the State Career Education Project Coordinators meeting on January 9 for the purpose of summarizing individual career education programs and for discussing career education plans for FY 1976-1977.

The Careers Resource Project, in cooperation with WTVW-Channel 7, Evansville, conducted two career education "sharing day" programs. These programs were presented by educators teaching in schools within the project area under the direction of staff consultants. The first sharing day, scheduled for

February 15 was designed for elementary school personnel (K-6); the program for middle school and high school (7-12) educators was held on March 14. Both telecasts were designed to (1) increase professional and general awareness of the career education philosophy, (2) demonstrate techniques of "how to" implement or "infuse" career education concepts into the current school curriculum, and (3) to provide information of the present existing career education materials that are made available for teacher use through the Careers Resource Project.

The Careers Resource Project hosted the Southern Career Guidance, Placement and Follow-Up Conference held at French Lick on March 3, 1976.

The Warrick County speaker directory was completed and distributed to teachers in the corporation on March 23. The project supported the Boonville Kiwanis Club in this effort to develop this directory of potential guest speakers, potential field trip sites, and job observation and employment possibilities.

The project staff retreat was held at New Harmony on March 30-31, 1976, for the purpose of modifying and finalizing the Rural School-Based Career Education Model.

It was disclosed in March that the Southwest Dubois County School Corporation will not participate as the L.E.A for the CRP for the FY 1976-77. In late May, 1976, Indiana Vocational Technical College (IVTC) was selected as the L.E.A for the Careers Resource Project for FY 1976-1977. The project will begin its operation effective July 1, 1976, at I.V.T.C., located at 3501 First Avenue, Evansville, Indiana.

PARTICIPATING SCHOOL CORPORATIONS AND SCHOOLS

(1973-74)

Sixty-five orientation and in-service programs involving over 600 local educators were conducted in the 38 participating school corporations. They included the following schools:

School	Grades
Crawford Co. Comm. School Corp.	
English School	1-12
Leavenworth School	1-12
Marengo Elementary and High School	1-12
Milltown Elementary and High School	1-12
Patoka School	1-8
Northeast Dubois Co. School Corp.	
Dubois High School	9-12
Southeast Dubois Co. School Corp.	
St. Anthony School	K-8
Birdseye Elementary School	K-8
Schnellville School	1-8
Ferdinand Consolidated School	K-8
Forest Park High School	9-12
Southwest Dubois Co. School Corp.	
Huntingburg Middle School	6-8
Greater Jasper Consolidated Schools	
Ireland Junior High School	6-8
Jasper High School	9-12
Fifth Street Elementary School	K-8
Tenth Street Elementary School	1-8
North Gibson School Corp.	
Princeton Comm. High School	9-12
Princeton Comm. Middle School	7-8
M.S.D. Shakamak Schools	
Shakamak Middle School	5-7
N. Central Comm. School Corp.	
N. Harrison Middle School	6-8

School	Grades
Vincennes Comm. School Corp.	
George Rogers Clark Junior High School	7-8
Orleans Comm. Schools	
Orleans High School	7-12
Springs Valley Comm. School Corp.	
Springs Valley High School	7-12
Cannelton City Schools	
Cannelton High School	7-12
Tell City-Troy Township School Corp.	
Hoosier Heights Elementary School	K-8
Newman Elementary and Junior High School	3-8
St. Paul Elementary and Junior H.S.	1-8
Tell City High School	9-12
Pike Co. School Corp.	
Winslow Elementary School	K-5
Pike Central H.S.	9-12
Otwell Elementary School	K-5
M.S.D. Mt. Vernon	
Mt. Vernon Junior High School	7-8
M.S.D. N. Posey Co. Schools	
N. Posey Junior High School	7-8
Southwest School Corp.	
Sullivan High School	9-12
Evansville-Vanderburgh School Corp.	
Caze Elementary and Junior High School	K-8
Cynthia Heights Elementary and Junior H.S.	K-8
Fairlawn Elementary and Junior H.S.	K-8
Hebron Elementary and Junior H.S.	K-8
Tekoppel Elementary and Junior H.S.	K-8
Thompkins Elementary and Junior H.S.	K-8

(1974-75)

During the second year of funding, a total of 38 school corporations collaborated with the Careers Resource Project in an effort to infuse career education concepts into their curriculum. A total of 127 schools were involved representing 16 counties. They were:

School	Grades
Barr-Reeve Comm. Schools, Inc.	
Alfordsville Elementary School	K-6
Barr-Reeve Elementary School	K-7
St. Peter's Elementary School	K-7
Cannelton City Schools	
Cannelton Elementary School	1-6
Cannelton High School	7-12
Clay Comm. Schools	
Clay City Elementary School	K-6
Eastside Elementary School	K-6
Forest Park Elementary School	K-6
Jackson Township Elementary School	K-6
Meridian Street Elementary School	K-6
Staunton Elementary School	K-6
Staunton High School	7-12
Van Buren Elementary School	K-6
Crawford Co. School Corp.	
English Elementary and High School	1-12
Leavenworth Elementary and High School	1-12
Marengo Elementary and High School	1-12
Patoka Elementary School	1-8
East Washington School Corp.	
Eastern Elementary School	1-6
Eastern High School	7-12
Evansville Diocese Catholic Schools	
Flaget Elementary School	K-6
Mater Dei High School	9-12
Memorial High School	9-12
Rivet High School	7-12
St. Boniface Elementary School	6-8
St. James Catholic School	K-8

School	Grades
St. Joseph Catholic School	K-8
St. Peter and Paul Catholic School	K-8
Washington Catholic Middle School	6-8
Evansville-Vanderburgh School Corp.	
Caze Elementary School	K-8
Cynthia Heights Elementary School	K-8
Fairlawn Elementary School	K-8
Harrison High School	9-12
Lincoln Elementary School	K-8
Stringtown Elementary School	K-8
Tekoppel Elementary School	K-8
Washington Elementary School	K-8
West Terrace Elementary School	K-8
Franklin Township School Corp.	
Lanesville Elementary School	1-8
Greater Jasper Consolidated School Corp.	
Fifth Street Elementary School	K-8
Ireland Junior High School	6-8
Ireland Northside Elementary School	K-5
Jasper High School	9-12
Tenth Street Elementary School	1-6
Tenth Street Elementary School	1-6
Tenth Street Junior High School	7-8
Indianapolis Diocese Catholic Schools	
Annunciation Elementary School	K-6
Lutheran Schools of Indiana	
St. John's Lutheran School	9-12
St. Peter's Lutheran School	K-8
M.S.D. Mt. Vernon	
Mt. Vernon High School	9-12
Mt. Vernon Junior High School	7-8
M.S.D. North Posey County	
North Posey Junior High School	7-8
North Posey Senior High School	9-12
South Terrace Elementary School	K-6
M.S.D. of Shakamak	
Shakamak Middle School	5-7

School	Grades
New Harmony Town and Township Schools	
New Harmony Elementary and High School	K-12
North Central Comm. School Corp.	
Morgan Elementary School	1-5
North Central High School	9-12
North Harrison Elementary School	1-5
North Harrison Middle School	6-8
Northeast Dubois Co. School Corp.	
Celestine Elementary School	K-6
Cuzco Elementary School	K-6
Dubois High School	9-12
Dubois North Side School	K-6
Dubois South Side School	K-8
Haysville Elementary School	K-6
North Lawrence Comm. Schools	
Fayetteville Elementary School	K-6
Lincoln Elementary School	1-6
Oolitic Elementary School	1-8
Parkview Elementary School	1-6
Shawswick Elementary School	1-8
Springville Elementary School	K-6
North Spencer Co. School Corp.	
Chrisney Elementary School	K-6
Clay-Huff Elementary School	K-6
David Turnham Educational Center	K-6
Orleans Comm. Schools	
Orleans Elementary School	1-6
Orleans High School	7-12
Paoli Comm. School Corp.	
Paoli High School	7-12
Stalcup Elementary School	1-3
Throop Elementary School	4-6
Perry Central Comm. School Corp.	
Perry Central Elementary School #1	K-6
Perry Central Elementary School #2	1-5

School	Grades
Pike Co. School Corp.	
Otwell Elementary School	K-5
Salem Comm. Schools	
Salem High School	9-12
Shoals Comm. School Corp.	
Shoals Elementary School	1-8
Southeast Dubois Co. School Corp.	
Birdseye Elementary School	K-8
Ferdinand Elementary School	K-8
Forest Park High School	9-12
Schnellville Elementary School	K-8
South Knox School Corp.	
Decker Elementary School	K-6
South Knox Junior High School	7-8
South Knox Senior High School	9-12
South Gibson School Corp.	
Haubstadt Public School	K-8
South Spencer Co. School Corp.	
South Spencer High School	8-12
Southwest Dubois Co. School Corp.	
Crestview Elementary School	1-5
Holland Elementary School	1-5
Huntingburg Middle School	6-8
Maple Park Elementary School	1-5
Southridge High School	9-12
Springs Valley Comm. School Corp.	
Springs Valley Elementary School	K-6
Tell City-Troy Township School Corp.	
Franklin Elementary School	K-5
Hoosier Heights Elementary School	1-8
Newman Elementary School	1-8
St. Paul Elementary School	1-8
Tell City High School	9-12

School	Grades
Warrick Co. School Corp.	
Boonville High School	9-12
Boonville Junior High School	7-8
Ella Williams Elementary School	K-6
Newburgh Elementary School	K-8
Oakdale Elementary School	K-6
Tecumseh High School	9-12
Yankeetown Elementary School	K-8
West Washington School Corp.	
West Washington Elementary School	K-6

(1975-76)

Approximately 75 schools participated during the 1975-76 school year. They included the following schools:

School	Grades
Clarksville Comm. School Corp.	
Clarksville Senior High School	9-12
Clarksville Middle School	6-8
Crawford Co. Comm. School Corp.	
Marengo School	1-12
Barr-Reeve Comm. Schools, Inc.	
Alfordsville Elementary School	K-6
Northeast Dubois Co. School Corp.	
Cuzco Elementary School	1-6
Celestine Elementary School	K-6
Dubois North Side School	1-8
Dubois South Side Elementary School	K-8
Haysville Elementary School	1-6
Southeast Dubois Co. School Corp.	
Forest Park High School	9-12
Ferdinand Consolidated School	K-8

School	Grades
Southwest Dubois Co. School Corp.	
Southridge High School	9-12
Huntingburg Middle School	6-8
Greater Jasper Consolidated Schools	
Fifth Street Elementary School	K-8
Ireland Junior High School	6-8
Tenth Street Elementary School	1-8
Jasper High School	9-12
North Gibson School Corp.	
Princeton Comm. High School	9-12
South Gibson School Corp.	
Haubstadt Public School	K-8
North Central Comm. School Corp.	
N. Harrison Middle School	6-8
N. Harrison High School	9-12
N. Harrison Elementary School	1-5
Vincennes Comm. School Corp.	
LaSalle Elementary School	K-6
Franklin Elementary School	K-6
Lincoln High School	9-12
Clark Junior High School	7-8
Harrison Elementary School	K-6
Riley Elementary School	K-6
Tecumseh Elementary School	K-6
Vigo Elementary School	K-6
Washington Elementary School	K-6
North Lawrence Comm. Schools	
Dollens Elementary School	K-6
Oolitic Elementary and Middle School	1-8
Shawswick Elementary and Middle School	1-8
Springville Elementary School	1-6
Shoals Comm. School Corp.	
Shoals Comm. Elementary School	K-5

School	Grades
Monroe Co. Comm. School Corp.	
Bloomington High School North	9-12
Unionville Middle School	6-8
Unionville Elementary School	K-5
Orleans Comm. Schools	
Orleans High School	7-12
Cannelton City Schools	
Cannelton High School	7-12
Pike Co. School Corp.	
Pike Central High School	9-12
M.S.D. Mt. Vernon	
Mt. Vernon High School	9-12
M.S.D. North Posey Co. Schools	
N. Posey Junior High School	7-8
North Spencer Co. School Corp.	
Chrisney Elementary School	K-6
David Turnham Educational Center	K-6
Heritage Hills High School	7-12
Clay-Huff Elementary School	K-6
South Spencer Co. School Corp.	
Luce Elementary School	1-6
Rockport-Ohio Elementary School	K-6
Evansville-Vanderburgh School Corp.	
Cynthia Heights Elementary and Junior H.S.	K-8
Glenwood Elementary and Junior H.S.	K-8
Hebron Elementary and Junior H.S.	K-8
Helfrich Park School	K-8
Lincoln Elementary and Junior H.S.	K-8
McGary Elementary and Junior H.S.	K-8
Daniel Wertz Elementary and Junior H.S.	K-8
Lodge Elementary School	K-6
Vogel Elementary and Junior H.S.	K-8
Oak Hill Elementary and Junior H.S.	K-8
Dexter Elementary and Junior H.S.	K-8
Tekoppel Elementary and Junior H.S.	K-8

School	Grades
Stringtown Elementary and Junior H.S.	K-8
Washington Elementary and Junior H.S.	K-8
Harrison High School	9-12
Reitz High School	9-12
Evansville Private and Parochial Schools	
Corpus Christi School	K-8
St. Anthony School	1-6
Lutheran School Assoc. of Evansville	K-8
Warrick Co. School Corp.	
Boonville High School	9-12
Newburgh Elementary School	K-8
West Washington School Corp.	
West Washington Elementary School	K-6
West Washington Jr-Sr High School	7-12
East Washington School Corp.	
Eastern Junior High School	7-8

CAREER RESOURCE PROJECT

Products

Career Education Materials Catalog

During the first year (1973-74) of the project, a Materials Catalog was developed to facilitate the dissemination of commercially prepared career education material to teachers. During the 1974-75 and 1975-76 years of the project, the Materials Catalog was updated to include the recently purchased materials. Seven hundred and fifty (750) have been distributed to participating schools.

Career Expressions Newsletter

The monthly newsletter started in 1973-74 has continued to be sent to all participating Careers Resource Project schools. The first year 450 copies were sent to 41 schools. During 1974-75, 600 copies were sent to 113 schools monthly. In 1975-76, 200 monthly copies of the Career Expressions newsletter were sent to 90 schools. In addition to project area circulation, 500 copies were sent to individuals upon request. As of this printing date requests are still being made from across the United States. The May, 1976 issue is located in Appendix A.

Project Brochure

In 1973 a project brochure was developed explaining the goals and objectives of the Careers Resource Project. Early in the 1974-75 school year, the brochure was updated to include additional information on the Project's goals and to include the CRP services available to schools. Twenty-five hundred (2500) copies of the brochure have been given to individuals as a means of publicizing the project and its services.

Human Resources Directories

Over the three year period of the project, the CRP staff has helped 20 schools develop human resource directories for use by their teachers. The directory has been used as a guest speaker roster, job observation roster, possible job placement roster, etc.

Infusion Game (Pick-a-Card)

"Pick-a-Card" was developed by the CRP staff as an adaptation of "Grab Bag Infusion" originally developed by the Indiana Career Resource Center of South Bend.

The purpose of this activity is to demonstrate that career concepts can easily be infused into subject curriculum. In a workshop setting, teachers are grouped in two's or three's according to grade levels or subjects they teach. Each group picks one card (from 10) on which career concepts are defined. Next, they pick several cards of student activities (such as reporting, role playing, drawing, reading). Selecting a specific lesson topic of their subject matter group, their task is to decide on one activity which utilizes their career concept student activity and specific subject matter. After ten minutes of discussion, the small groups report back to the larger group with their results. It has been interesting to note that often not only one but several infusion ideas have been developed by each small group.

Video-Tape Field Trips

Video-taped field trips can be one answer to the problems which prevent schools from embarking on classroom field trips to local businesses and industries. The Careers Resource Project realized the need and advantages of interviewing workers on various jobs, and therefore utilized the center's video-taping equipment to produce twelve video field trips. During 1975-76, video-tapes were presented in 32 schools. A total of 470 teachers were inserviced on the advantages of the use of video-tapes. Evaluations made by teachers after each presentation responded that taping content (vocabulary and relevance) was "very good."

A Research Study Summary of Parental Attitudes Toward Their Child's Career Choice

During 1975 the Career Resource Project initiated a research study aimed at determining how parents in four southern Indiana school corporations felt about their own career path and that of their child. A total of 1,564 questionnaires were mailed to parents with students in grades three, six, nine, and twelve. After three follow-up mailings, 43% of the questionnaires were returned by October, 1975. The largest percentage of parents (47%) indicated that their own parent or relative influenced their career choice with friends rated second (23%). On the subject of career education being taught to their children, 36% of the respondents suggested their child be exposed to careers during junior high school, 30% at all grade levels, 25% during high school, 8% elementary school, and 1% not at all. Questioned as to how parents would encourage their child at the time of high school graduation, 45% indicated enrollment in college, 32% vocational-technical school, and 14% immediate employment.

Although parents indicated a strong interest in vocational-technical education, the suggested career paths for their children indicates the traditional reliance on a college education. In addition, parents feel the place to expose children to careers is in the school. A large amount of sexual stereotyping was noted in regard to the suggested career path for a son or daughter. There appears to be little correlation between the career of the parent and the suggested career path for the child. Effort must be taken to make parents increasingly aware of the potential careers for their children and the efforts being made by the school in the area of career education.

Career Education Units

During the 1973-74 school year, 20 Career Education Units were developed by teachers from the participating project area schools. Many of the teachers involved in this initial phase of the project were opposed to the mass production of units and so the 1974-75 and 1975-76 CRP consultants did not pursue the same course of action as that of the first year. The staff concentrated instead on the use of career education activities in the classroom which were recorded only if the teachers felt they were worthwhile. Therefore, only the best career education units were prepared and those were basically kept by the teachers who prepared them. The consultants made every effort to verbally transport workable ideas from one school to another. The consultants reported many of the career education activities in the project's newsletter. An example of a career education teaching unit is located in appendix B. This unit, the Popsicle Report, was highly popular and requested by 35 school districts in the United States.

Infusion of Career Education Concepts into Current Curriculum (Infusion Manual)

An infusion manual entitled Infusion of Career Education Concepts into the Current Curriculum was developed in 1974-75 and provided to all participating teachers as a means of assisting them in the incorporation of career education concepts into the traditional curriculum. (See Appendix C)

K-12 Performance Objectives for Teachers

In an effort to follow federal guidelines on evaluation, the CRP has formulated teacher performance objectives for grades K through 12. (See Appendix D)

Career Education Bulletin Board Cartoons

A thirty-five page book which helps relate subject matter to the world of work was disseminated to participating schools in the project area. This book can be used as a coloring book by students in grades K-3; it offers suggestions to bulletin board displays and represents a public relations tool for the Career Resource Project in marketing the career education concept in Southwestern Indiana.

Career Corners

During 1975-76, "Career Corners" were established as an incentive project for career teams. Team members and media coordinators attached to the screen samples of free career-related materials. Students had the opportunity to write for additional information as a result of this prominent display.

"Career Corners" were 4' x 4' self-supported screens or room-dividers constructed of masonite and wood, donated by local furniture factories. To make them more attractive and eye-catching, the units were painted in pastel colors and the logo "Career Corner" painted in brilliant red.

Career Boxes (Games and Activities)

Twelve K-6 activities were developed by the CRP to be used as the demonstration of career education ideas for teachers in a workshop setting. Each of the experiences included a discussion of materials needed and directions for the completion of the activity. Each workshop participant was asked to complete one experience independently and share the activity with the group as he might use it in the classroom.

Career Education Ideas for Teachers

During the 1974-75 year, the CRP completed several handouts to be used with teachers in participating schools. Career Education Ideas by Subject Areas (Appendix E) was designed to help teachers in grades 9-12 see some possible ways to use career education in their subject areas. Student Project Ideas was compiled from ideas the CRP staff had seen in action in the field.

A Manual for the Implementation of a Rural-Based K-12 Career Education Program

(Career Education Model)

As a result of our efforts, mistakes, and successes over a period of three years of helping schools in our 16-county area develop career education programs and activities, we have compiled an extensive manual (model) of suggestions pertaining to the establishment and development of a K-12 career education program.

While it is aimed primarily at those who are contemplating or involved in establishing a program in a rural area including several schools, it also would be useful as a guide to proposed or developing programs or projects in an urban area.

The manual includes sections on administration, planning, and staffing aspects as well as initiating and developing a program, in-service training of teachers, recommended career education materials, recommended audio-visual equipment, and classroom activities and student project suggestions. It also includes a schematic and explanation of the high school level comprehensive placement program which was developed to augment classroom 9-12 career education activities.

Comprehensive Placement

A major task for the CRP during the 1975-76 school year was the development of a placement model for the senior high school. The structure of the model was comprehensive (see Schematic in Appendix G) since a comprehensive view of placement was most consistent with a basic goal of career education--namely, serving all students whether they plan to leave school to seek immediate employment, to continue their education on the postsecondary level, or to pursue a combination of work-study goals (e.g. entering military service).

It should also be stated, that effective comprehensive placement was viewed as an outgrowth of preceding career education activities. More specifically, its successful implementation rests, in part, on the assumption that a student--be he an eventual high school dropout or graduate--will have acquired a degree of self-awareness, some knowledge about the world of work, and insights about reasonable decision-making by the time he reaches senior high school. It is hoped that by virtue of such knowledge the student will be more employable and/or better motivated to pursue further study upon leaving senior high school.

Planning and Implementing a K-6 Career Education Program From the View of the Consultant

This paper is a description and documentation of one consultant's one year effort in an elementary school in Southwestern Indiana. It is an example of what one consultant devoting one day a week to a group of interested elementary teachers can accomplish. The information reported in this paper is not a total or complete career education program; rather, it is the beginning of the career education program being implemented at the Newburgh Elementary School.

Part one is a description of how this consultant planned, modified, and finally implemented her goals. It describes the varied approaches used by the teachers and the types of career education activities that they developed as a result of this consultant's efforts. This is followed by a brief discussion of the positive and negative aspects of being a consultant from outside a school corporation. Finally, there is a section on recommendations to other persons working in this capacity.

The second part of this paper is a documentation of what happened, when, and with what results. There are three means used to show these efforts: (1) a calendar of consultant visits and Careers Resource Project services used by the Newburgh teachers; (2) a series of photographs taken by this consultant showing some of the career education activities as they heppened during the 1975-76 school year at Newburgh; and (3) a sample of career education activities developed by the Newburgh teachers.

Mobile Units

During its three years of operation, the Careers Resource Project has made extensive use of two mobile units. These mobile units were used to: (1) provide an instructional materials resource library for administrators, counselors, teachers, and students, as well as (2) provide a public relations and information tool to inform educators and the general public of the project's existence, purpose, and services.

The first mobile unit, a used bookmobile, was put into service in March, 1974, after eight characters depicting various careers had been painted on the "windows" of the unit by students at Caze Elementary School in Evansville. Much newspaper and television news coverage was generated by the painting project explaining the purpose of the mobile unit and the Careers Resource Project in area news media.

The mobile unit, stocked with a multi-media range of career-related materials, was used by 22 schools during the remainder of the project's first year.

During the second year of the project, a second mobile unit was purchased, equipped, and put into service in October, 1974. Because of an increased number of requests from schools for the use of the mobile units, a master schedule was established allocating each consultant blocks of time during which the mobile units could be scheduled by their assigned schools. This made for more evenly distributed use of the mobile units throughout the 16 county project area. Approximately 50 schools made use of the mobile units during the second year of the project.

The third year of the project saw increased use of the mobile units as nearly 70 schools used them during the year for periods ranging from one to ten days.

Over the three-year period, the mobile units were also utilized over 20 times by other state or federally funded career education projects in the state and for conferences such as the Indiana State Teachers Association Workshops.

Because it is almost impossible for some area educators to come to the project resource center and because students of schools in our basically rural area would not otherwise have had access to many career education related materials, the two mobile units were found to be very useful in furthering the development of career education in the rural setting. The multi-media careers resource materials displayed on the mobile units were used to (1) develop awareness and understanding of career education; (2) provide materials and ideas for career infused curriculum development; (3) student exploration for occupational information; as well as (4) public relations and increased information to educators, civic groups, parent-teacher groups, and the general public in the area the project serves. The doubling of requests for mobile units use and the increased interest in and development of career education in the project area schools gives clear indication of the value of career education mobile units.

Do's and Don'ts for Mobile Unit Use

1. Please explain to the students that they are not allowed to check material off the unit, but that you will be able to for them. Please be sure to sign the Check Out Log and to return the material before the unit leaves your school. (All of the material on the unit is available to you through the CRP.) Simply mail us a request and we will either hand deliver or mail to you what you have requested.

2. Students should not be on the unit without an adult present.

3. The same rules of conduct expected by the school are to be observed on the mobile unit.

4. If at all possible allow additional time for your students to return to the unit for additional information.

5. Care should be taken to schedule the use of the unit so that:

   a. all students are assured of an adequate amount of time to use the materials on the unit.

   b. no more than 12 students are on the unit at one time.

   c. students of similar grade levels are on the unit at the same time.

   d. students who wish to explore further can return to the unit to do so.

   e. there is an adult present with each group of children to supervise and direct their efforts.

Preparing Your Students Use of the Mobile Unit Materials

1. To find out your students' interests use either the Job-Orientation Self Awareness Inventory or the Occupation Preference Sheet or make up one of your own.

2. Can your students read fairly well and independently?

   If yes, the written material on the mobile unit will be appropriate.
   If no, use filmstrips and cassettes with them to find job information.

3. Work out a sheet of questions for students to answer while using the mobile unit or use the Career Information Sheets. Two sheets have been provided, one simple one and one that demands much more thorough investigations by the students. Use one and then two.

Career Resource Center

During the three year period of 1973-76, the Careers Resource Project's Materials Center proved to be an important element in the promotion of career education in Southwestern Indiana. It served the following purposes:

a. Housed and displayed career education materials--comercially and locally developed;
b. Disseminated materials;
c. Provided in-service workshops on the use of materials;
d. Provided assistance for schools requesting career-related materials and ideas;
e. Exhibited materials to visiting guests;
f. Served as "home base" to staff members for the purpose of exchanging ideas concerning materials.

As the Center's inventory grew, so did the number of requests for loan of materials. Although many schools purchased their own career materials as a direct result of the use of the Center's, in no way could the supply stay in step with the demands. But, through the accumulation of free materials and a well-planned loan system, there was very little discontent among the users in the service area.

Over the past three years, numerous teachers and students benefited from the materials. During the first year, teachers and students from 38 participating school corporations borrowed materials and equipment. The records for the second year indicated that materials were checked out 436 times and used by 1741 teachers. Finally, the third year, these numbers show a total of 281 pieces of materials utilized by 2,334 teachers and 69,279 students. These numbers do not reflect frequency of use on the mobile units.

EVALUATION OF THE PROJECT

External evaluation, contracted through New Educational Directions (NED), Crawfordsville, Indiana, consisted of periodic visits made during 1973-1976. During the three year period ending May 4, 1976, NED spent 133-man days on-site observing, interviewing the staff and working with the project on procedures. This third party evaluation in its entirety is documented in Appendix G.

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS FOR THE FUTURE

Although the project has only been in operation since July, 1973, there are some conclusions, implications, and recommendations that the present staff personnel should recognize and document.

The Careers Resource Project staff feels that much has been accomplished during the past three years at all levels, K-12. This is reflected in that in excess of 120 schools had some degree of exposure to career education. This represents about 80 additional schools since the first year. A total of 38 school corporations participated as compared to only 15 initially.

While the recommendations given below are based on the experience of the CRP, it is felt that they may be of potential value to the development and operation of any career education program.

--That teacher in-service and individual consultations are the most useful method of implementing career education into the school curriculum.

--That career education workshops are necessary in order for teachers to become aware of the need for career education in the schools, for developing teacher skills in writing lesson plans that include career education concepts, and for bringing about changes in the curriculum.

--That career education has created a new enthusiasm on the part of students and teachers through the use of guest speakers in the classroom, field trips into the community, and the encouragement that it has brought to develop teacher creativity.

--That career education in Southwestern Indiana has broadened the scope of the curriculum as a vehicle for involving the whole community into the school program. The concept of career education is gaining the acceptance of educators in the project area.

--That career education has introduced new horizons to students into occupational areas they never dreamed they could enter; young women are considering entering careers that are outside the stereotyped jobs women have chosen for generations, (teacher, secretary, nurse); young men have been introduced to careers that are outside the region where they have always lived and also above the level of aspirations of their parents' generation.

--Parents should be made more aware of the importance of career education.

--That a program should have reasonable goals given the constraints of finances, manpower, and time. Whenever feasible, such goals should be carefully planned and periodically reviewed by the staff to assess their reasonableness in the light of experience.

--That it should be remembered that the career education concept is very broad in scope so that no program can hope to accomplish everything overnight. Rather the following philosophy is recommended: Whenever feasible, a coherent K-12 career education effort should be developed so that continuity is integrated into the program. In addition, in working with school personnel (administration, teachers, counselors), the importance of community resources should continuously be kept in mind in planning activities, such resources becoming increasingly important as the student goes through the school grades.

--That because of its potential to reach all students, the infusion approach to career education by integrating or infusing career education concepts into regular courses and classes is strongly recommended. However, some schools offer separate "occupations" courses and such schools should also be given assistance if they seek it. In the formative stages, schools trying to determine whether to use the infusion or separate course approach should be strongly urged to adopt the infusion approach.

--In making the initial contact with the administration of a school district, it is imperative that sincere rapport be established. More specifically, this implies on the part of the project representative an ability to discuss the career education concept intelligently as well as to point out the value that career education can have for the school district.

--That the difference between orientation and in-service programs should be kept in mind. The basic purposes of the former are: (1) to briefly explain career education, (2) to suggest some ways it can be used by the school, and (3) to begin identifying teachers who wish to explore the concept further. Therefore, conceptual overloading should be avoided in orientations. It is in in-service activities that greater depth and specificity are appropriate.

--Initially, only a minority of the faculty will usually wish to get involved in career education activities. This need not be an obstacle. High quality work with a few teachers is a legitimate activity in itself and often leads to expanded faculty involvement. In some cases, the administration will insist that a career education program should be taken on by all faculty of his school. Discourage total involvement unless all faculty members are willing to participate. Teachers who volunteer to become actively involved in the career education program will offer their time to make it a successful program; teachers who have been forced into the program will participate grudgingly, if at all! Therefore, a school should not be "dropped" simply because only a few of its teachers wish to participate in a career education effort.

--That if invited to sit in on faculty or departmental meetings, consultants should do so at times since valuable insights can be acquired in this manner concerning teacher concerns and curricular possibilities pertinent to career education.

--There is a particular need to develop senior high school career-related materials in the areas of the "humanities" since teachers of these subjects sometimes feel--erroneously--that no job opportunities exist in their field outside of teaching.

--A career education program should not neglect the needs of the handicapped and disadvantaged.

--While the basic principles of career education apply to both urban and rural settings, the latter imply a greater degree of isolation from community resources and from access to occupational information. Therefore, particular procedures (e.g. mobile units) should be utilized to overcome such isolation. ALL EDUCATORS WHO HAVE UTILIZED THE SERVICES OF THE MOBILE UNITS HAVE EXPRESSED TOTAL SATISFACTION.

--Should a school consider the possibility of establishing a systematic placement program, the adoption of a comprehensive placement program should be encouraged due to its capability of serving all students.

--Schools should be encouraged to devise methods to evaluate their career education program.

--That feedback from the field should be solicited so as to gain insights concerning potential improvement of the peoject's services.

APPENDIX A

CAREER EXPRESSIONS

★ CAREER EXPRESSIONS ★

CAREER EXPRESS

SOUTHERN INDIANA
CAREERS RESOURCE PROJECT
"NEWSLETTER"

511 4th Street Huntingburg, Ind. 47542
Phone (812) 683-3333
Joe W. Roth, Director

MAY 1976
"Career Education Makes Cents"

WEST WASHINGTON SCHOOL CORPORATION CAREER DAY

From the expressions on the faces of the students in the West Washington School Corporation, April 30 was a rewarding day. Through the efforts and diligent planning of school counselors Brust and Nikirk, students were afforded the opportunity to talk to people representing various career backgrounds.

Each speaker, equipped with tools of his trade, brought reality into the classroom. Junior high students, selecting three of the nine 55-minute morning sessions had an excellent opportunity to listen to, discuss with and ask questions of the representative lecturers.

The afternoon sessions were geared to students from kindergarten through sixth grade. Students learned about careers of the State Policeman, artist, and photographer. A lecture on the importance of gun safety was also provided by the forestry service.

On display throughout the day were the State Police car, National Guard service car, Campbellsburg fire truck, local trucker and his semi, and the Army cobra helicopter. Although the day proved to be interesting and exciting for students and teachers alike, the highlight of the day was the landing of the Army cobra helicopter.

Thanks go to everyone who made the Career Day a success!

A WORD FROM THE DIRECTOR. . .

It is hard to believe that three years have gone by! On behalf of the Careers Resource Project consultants--Judy, Ed, Art, Gilda, Alex, and Gina--I would like to take this opportunity to thank you for the time given and the hospitality shown us as we worked with you in the development of career education in your schools.

Be assured that in the future, we will continue to serve our colleagues in the schools in the best way we can. Your continued support will be both welcomed and appreciated.

Our next issue of Career Expressions will be published in October, 1976. My best wishes to you for a pleasant summer.

--Joe W. Roth, Director

****

STATE SHARE DAY

Sixty teachers representing schools from Griffith to New Albany and from Terre Haute to Richmond met in Indianapolis for the annual State Share Day on May 7 to "show and share" career education ideas.

Highlighting the day were the informal presentations made by each participating teacher, K through 12, followed by group discussion. In addition, the Elkhart Career Center displayed their mobile unit concept of cross-grade instruction in career education.

Dr. James Weigand, I. U. Professor of Science Education, spoke to the group on the affect of careful and individual attention for each student in respect to his potential career. Teachers, he maintained,"are responsible in helping students fulfill their potentials and this responsibility must not be taken lightly."

The CRP would like to thank Mrs. Moore and Mrs. Laswell, Newburgh Elementary School, and Mrs. Schultz, Oolitic Elementary School, who represented the project area and helped make the State Share Day a success!

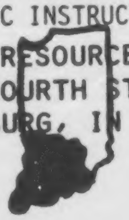
DUBOIS HIGH SCHOOL CAREER CARNIVAL

A different and unusual approach to career education was organized by Counselor Terry Hasler of Dubois High School. On April 8 the school gym was set aside as a "carnival" site for career education. Approximately 30 tables were set up in a booth affect to be used by representatives of 40 careers. Class by class, 9th through 12th grade students were released from their regularly scheduled classes to discuss on a one-to-one basis their career interests with any of the representatives. In addition, a member of the Employment Security Division was present to discuss summer and part-time jobs available to interested students.

Mr. Hasler expects to provide a Job Observation Day for the students next year as a realistic approach to the reality of work. Congratulations to Mr. Hasler for his excellent effort in promoting career education in Dubois High School!

****

INDIANA DEPARTMENT OF
PUBLIC INSTRUCTION
CAREERS RESOURCE PROJECT
511 FOURTH STREET
HUNTINGBURG, IN 47542



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APPENDIX B

POPSICLE REPORT
(TEACHING UNIT)

POPSICLE REPORT

Objective: To give the students an idea of how a pioneer village was constructed and phases of the life of a pioneer.

Introduction: A class trip was taken to Lincoln Pioneer Village in Rockport, Indiana.

Subject Areas: Indiana History, Social Studies, Art

Careers Involved: City Planning, Architecture, Engineering, Carpentry, Historian

Main Body: The actual building of the scale model village.

Procedure: The class was divided into groups. Each group was responsible for finishing a building. After the completion of the buildings, the students then designed the scale model village.

Evaluation: The students were able to relate the village to the careers previously discussed.

MATERIALS USED:

Buildings
- popsicle sticks
- toothpicks
- glue

Scenery
- cardboard boxes
- crepe paper
- evergreen twigs
- sponge
- aluminum foil

People
- clothes pins
- cloth material

River
- aluminum foil
- clay
- gravel

Bridges
- match sticks
- toothpicks

BUILDINGS CONSTRUCTED: church, school, mill, general store, trading post, blacksmith shop, two homes, inn

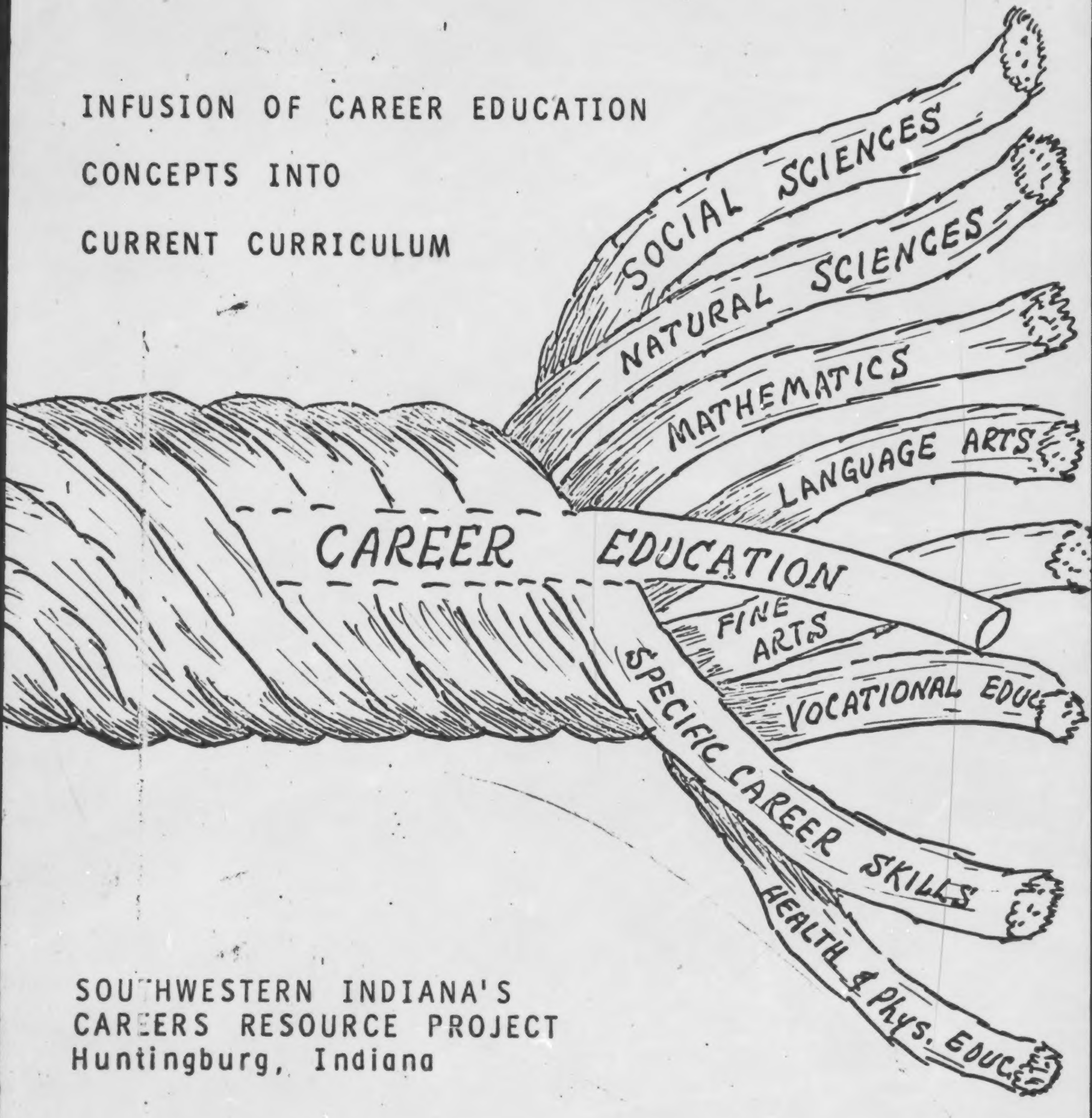
DEVELOPED BY: Randy Ayer
Fourth Grade Teacher
Newburgh Elementary School
Newburgh, Indiana 47630

APPENDIX C

INFUSION OF CAREER EDUCATION CONCEPTS INTO CURRENT CURRICULUM

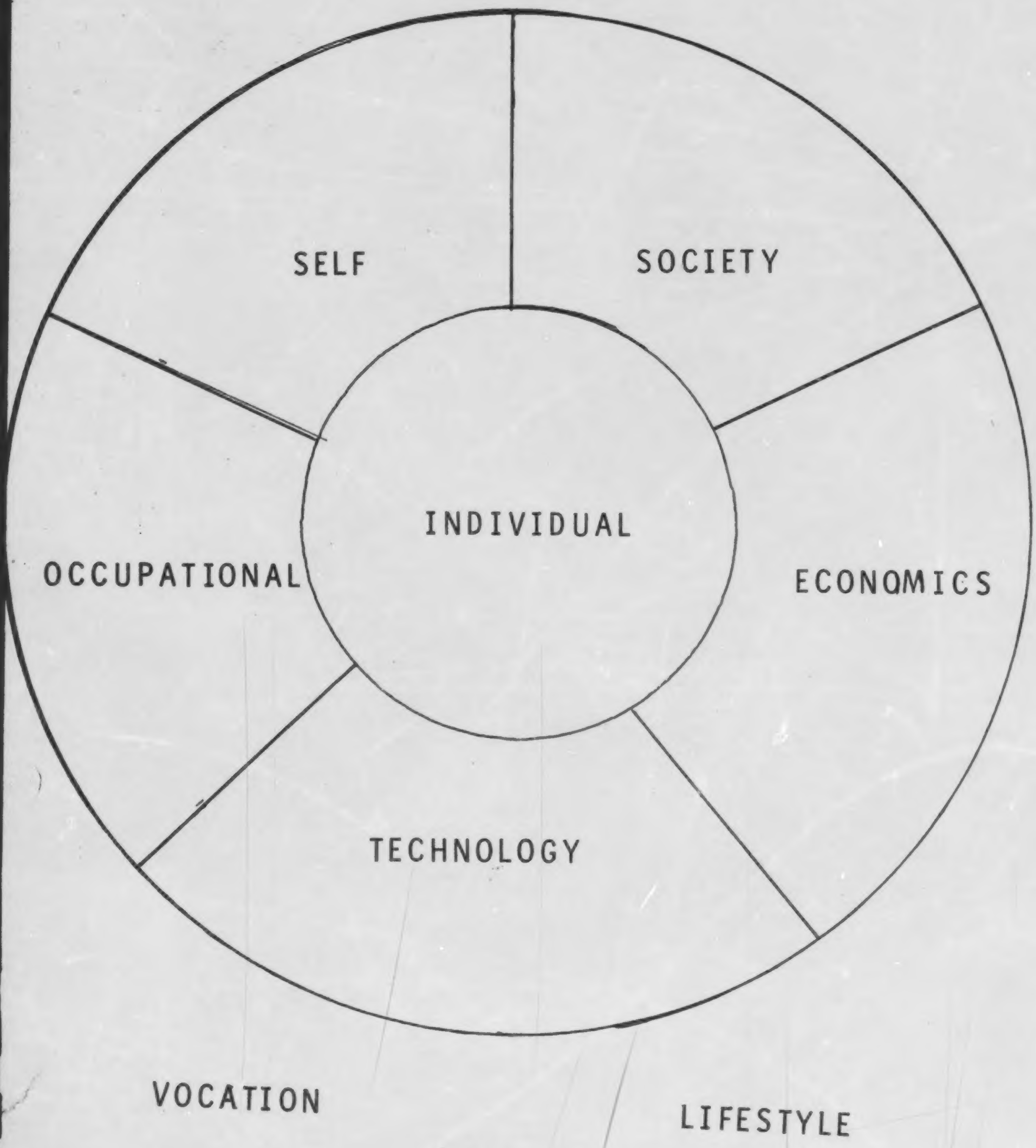
(INFUSION MANUAL)

INFUSION OF CAREER EDUCATION CONCEPTS INTO CURRENT CURRICULUM


SOCIAL SCIENCES
NATURAL SCIENCES
MATHEMATICS
LANGUAGE ARTS
CAREER EDUCATION
FINE ARTS
VOCATIONAL EDUC
SPECIFIC CAREER SKILLS
HEALTH & Phys. EDUC.

SOUTHWESTERN INDIANA'S
CAREERS RESOURCE PROJECT
Huntingburg, Indiana

WORLD OF WORK


SELF
SOCIETY
INDIVIDUAL
OCCUPATIONAL
ECONOMICS
TECHNOLOGY
VOCATION
LIFESTYLE

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ACKNOWLEDGEMENT

We wish to express our gratitude to Robert B. Jervis, Career Education Coordinator, Anne Arundel County Public Schools, Maryland, for sharing his thoughts and experiences with the Careers Resource Project staff.

His major contribution to the Career Education movement has been in the development of procedures "that work" for teachers and his thinking is reflected in this model plan.

CAREERS RESOURCE PROJECT
Huntingburg, Indiana

October, 1974

A MODEL PLAN FOR IMPLEMENTATION OF CAREER EDUCATION

STATEMENT

Although there is no one master plan for the implementation of Career Education programs in the regular classroom, most programs are using the "infusion" approach - that is, career activities are being introduced in all existing courses of study within the school. Because this project has stated that career education is not artificial, not add on, and not push-in; we feel that our "unified" plan of implementation for the schools in Southwestern Indiana should be based on the "infusion" process.

In order to stimulate the creative teacher's mind we feel that we need to have a flexible approach, while at the same time, our approach, to be effective, must also be consistent. The "infusion" process offers the teacher a solid foundation for implementation, but does not restrict his creative abilities.

HOW TO INFUSE

To Infuse means to make a part of and that is what we have in mind for the Southwestern Indiana schools. That is to make Career Education an integral part of the present curriculum being taught in our schools. In order to achieve this goal we will need to help the teacher become aware that an individual has to understand and cope with five general areas in our society; (1) himself, (2) the society, (3) technology, (4) economic factors, and (5) occupations. We have at our disposal a series of behavioral objectives for these five areas that can help teachers infuse Career Education into their curriculum. These objectives are also broken down into four levels of development to facilitate infusion: (1) K-2, (2) 3-5 (3) 6-8, (4) 9-12.

By using the appropriate objectives for your grade level and by following these nine steps, you can develop a workable plan for infusing Career Education concepts and activities into the teaching of any subject-matter area of the school's curriculum.

1. Decide the curriculum area in which you will be working.
2. Select a unit that you will be teaching in the area.
3. If necessary, further divide the unit into sub units of 5-10 days duration.
4. Determine the purpose of each unit by writing an objective of it.
5. Determine which of the 15 clusters you will focus on. (One or more)
6. Select a career objective(s) from any of the five areas that can be incorporated into the unit.
7. Keeping the Career Education objective(s) clearly in mind, list lesson topics that you will need to teach in order to get the unit objective over to the students.
8. Write a learning objective for each lesson. This objective should tell what you expect the students to be able to do when they have finished the lesson.
9. For each lesson, list the learning activities that you would have the students do.

The infusion method calls for many ways of presentation. With good teacher in-service training coupled with adequate teacher creativity, the infusion method is excellent. Some activities are listed below:

1. On-job-training
2. Reading about the world of work; briefs, etc.
3. Field trips to industries, businesses, hospitals, etc.
4. Research; writing for occupational information
5. Class discussion
6. Bulletin boards; displaying occupational information
7. Audio-visual devices; films, T.V. taping, filmstrips, audio tapes
8. Prepared handout materials; pamphlets, etc.
9. Resource personnel; guest speakers
10. Interview parents
11. Puppet shows
12. Surveys
13. Trade fairs
14. Cartoons
15. Career days
16. Simulation games
17. Community projects
18. Construct job charts
19. Job observation
20. Role playing

As stated earlier, it is our intent to apply this model for the infusion approach of implementing Career Education in the Southwestern Indiana Schools, because it enables the teachers to use their creativity while maintaining a consistant approach from the Careers Resource Project.

CAREER EDUCATION CONCEPTS

I. People work to satisfy many needs.

II. Many work roles may satisfy a person's needs and interests.

III. Everyone makes career decisions.

IV. Career development is a lifelong process.

V. A person's work role is influenced by his environment.

VI. People are unique and should not be stereotyped according to their occupations.

VII. Worker roles are interdependent.

VIII. The status of an occupation does not indicate its worth to society.

IX. Technology brings about change in our society.

X. Work roles for some may be leisure time activities for others.

OCCUPATIONAL
Behavioral Objectives
(K-2)

1. The student will participate in activities reflecting his identifications with worker roles.

2. The student will identify the different kinds of work people do in the home, school and community.

3. The student will compare and contrast the work and play in the school, home, and community.

4. The student will recall the many various jobs that he has performed over a period of time.

5. The student will name and discuss hobbies and interests.

6. The student will identify, within his immediate world, several jobs that are related and can be grouped into job families.

7. The student will identify and describe specific tasks within job families familiar to him.

8. The student will use primary communication, mathematical and problem-solving skills in work activities.

9. The student will demonstrate his mastery of simple manual and mental skills in the performance of work tasks requiring the use of materials and tools.

10. The student will identify the skills, tools, and materials needed to perform a job.

11. The student will demonstrate the simple manual and intellectual skills learned in the performance of work task can be applied to other work tasks.

SELF
Behavioral Objectives
(K-2)

1. The student will identify ways in which he is a distinct individual.

2. The student will identify and discuss the reasons why some work activities are personally satisfying to him.

3. The student will participate in various activities which help in expanding interests.

4. The student will give examples of things he likes to do and things he does well.

5. The student will identify attitudes and behaviors which help him and others to perform a task.

6. The student will demonstrate that he perceives things differently from other people.

7. The student will demonstrate that he perceives things differently from time to time.

8. The student will indicate things that he feels are important to him and others in his immediate world and discuss why he thinks these things are important.

9. The student will identify ways he and others make contributions in work and play activities.

10. The student will discuss what he learns about himself as a result of engaging in new tasks.

11. The student will identify and discuss the attitudes and behaviors which enable him to work and play cooperatively.

12. The student will demonstrate that his perception of people may differ from the perception of others.

SOCIETY
Behavioral Objectives
(K-2)

1. The student will identify people who are working together toward a common goal and explain how the work of each person contributes to the achievement of that goal.

2. The student will identify and discuss how customs, traditions, and attitudes of society relate to work.

3. The student will identify those needs of society which various individuals fulfill.

4. The student will identify benefits and rewards he receives for his work and from the work of others.

5. The student will discuss rules which protect people who produce and use goods and services.

ECONOMICS
Behavioral Objectives
(K-2)

1. The student will discuss why and how man must work to produce goods and services.

2. The student will discuss how people balance their needs and wants with available resources.

3. The student will identify his basic economic needs and wants and discuss the ways these are provided.

4. The student will discuss how changing demands for goods and services affect job opportunities

5. The student will identify and discuss different kinds of work which are related to various geographical areas.

TECHNOLOGY
Behavioral Objectives
(K-2)

1. The student will express his creative ability by using tools to construct projects from resources.

2. The student will demonstrate that the use of a variety of tools and materials will enable him to complete a task.

3. The student will identify and discuss the different ways people use tools and materials in the accomplishment of tasks and the production of products.

4. The student will identify and discuss things that change naturally or by man's intervention.

5. The student will examine the implication for man's work and leisure time when confronted with specific examples of withdrawing technology from his life.

6. The student will compare and contrast family and community living of the past and present in terms of the development of tools, materials, and processes.

7. The student will observe and discuss how technology which helps man can also cause problems if not properly used.

OCCUPATIONAL

Behavioral Objectives

(3-5)

1. The student will role play specific occupations based on his interests and hero images.

2. The student will cite examples of kinds of work people do outside his immediate experience that directly affect his life.

3. The student will demonstrate activities connected with a task, e.g., deciding, performing, supporting, and concluding.

4. The student will trace the vocational history of a real or imaginary individual with emphasis on the variety of jobs held.

5. The student will demonstrate his special interests through school or non-school activities.

6. The students will demonstrate that hobbies and interests combine elements of both work and play.

7. The student will provide examples of hobbies that may develop from interests.

8. The student will classify workers into occupational areas and characterize them as producing goods or services.

9. The student will discuss different kinds of preparation and performance necessary for various levels within an occupational area.

10. The student will illustrate interdependency between various jobs within occupational areas.

11. The student will analyze various work activities in terms of the processess, skills, and concepts derived from basic education necessary to their accomplishment.

12. The student will combine attitudinal, mental, and manual skills in the accomplishment of a variety of jobs.

13. The student will analyze the relationship between the skills, tools, and materials used in doing different jobs.

14. The student will support by example ways in which general attitudinal, intellectual, and manual skills used in various occupational areas are transferable in the accomplishment of a variety of jobs.

SELF

Behavioral Objectives

(3-5)

1. The student will assess his strengths and limitations in terms of the degree to which he can exercise control over them.

2. The student will identify and discuss how an individual may obtain personal satisfaction from his occupation.

3. The student will relate his interests and abilities to specific occupational roles.

4. The student will assess the relationship between his developing interests and his abilities.

5. The student will analyze his attitudes and behaviors as they affect his performance in specific tasks.

6. The student will demonstrate behaviors which indicate positive attitudes toward task performance.

7. The student will compare and contrast his interpretation of work environments of specific jobs with the way others interpret these enviroments.

8. The student will identify the persons and things that constitute his environment and affect the way he views work.

9. The student will determine how his values affect his attitude and performance in work situations.

10. The student will clarify his values by participating in activities which bring values into conflict.

11. The student will identify his emerging values and compare these beliefs with the beliefs held by most people.

12. The student will analyze how he and others have helped in the completion of various tasks.

13. The student will draw conclusions about self after performing tasks which are increasingly challenging and compatible with his development.

14. The student will discuss the processes required to complete a task and compare and contrast the ones he prefers to do.

15. The student will identify and discuss those attitudes and behaviors toward others which help him maintain a good working relationship.

SOCIETY
Behavioral Objectives
(3-5)

1. The student will discuss the interaction and interdependency of workers of societal groups and determine how their work contributes to the achievement of the goals of the group.

2. The student will compare and contrast changing customs, traditions, and attitudes as they affect jobs in various societies.

3. The student will compare and contrast the changing needs of society that affect job opportunities.

4. The student will identify and discuss the ways societal groups reward their members for their work.

5. The student will investigate the conditions which lead to protective legislation for producers and consumers and trace the resulting laws.

ECONOMICS
Behavioral Objectives
(3-5)

1. The student will examine how the work of many men has made possible a continuing increase in goods and services produced in our country.

2. The student will compare and contrast the economic incentives of our system with those various cultures.

3. The student will compare job opportunities today with those of the past in terms of the economic growth of our country.

4. The student will examine plans and choices he and others must make to use available resources effectively both as consumers and as producers.

5. The student will investigate how different people have provided for their basic economic needs and wants.

6. The student will ivestigate economic conditions which affect the number and variety of jobs available.

7. The student will identify geographical factors, i.e., climate, topography, resource, location, etc., and discuss how they affect work.

TECHNOLOGY
Behavioral Objectives
(3-5)

1. The student will make his creative ideas materialize through the use of technology and resources.

2. The student will construct projects and discuss the technology needed to complete the task.

3. The student will compare and contrast technology used by various cultures to satisfy needs and desires.

4. The student will relate and apply technology to his general studies.

5. Students will compare and contrast inventions and discoveries which have changed man's work.

6. Students will identify and discuss jobs that have appeared as a result of technological developments.

7. The student will construct imaginary accomplishments in technology that he would like to see occur and assess their implications for man's work and leisure time.

8. The student will trace and analyze the development of technology in one or more broad areas.

9. The student will analyze ways man can enhance his total environment if technology is used to his advantage.

OCCUPATIONAL
Behavioral Objectives
(6-8)

1. The student will make tentative occupational choices in terms of his interests, capacities, and values.

2. The student will identify kinds of work people do which have only marginal effects on his life.

3. The student will demonstrate kinds of work that involve working with people, working with ideas, and working with things.

4. The student will differnetiate between careers and jobs.

5. The student will explore a wide range of careers as they reflect his interest and abilities.

6. The student will cite the advantages and disadvantages of a variety of careers in terms of his interests and abilities.

7. The student will analyze the skills and processes related to various hobbies and interests which may influence career choice.

8. The student will evaluate the economic rewards obtainable through the pursuit of hobbies or interests.

9. The student will classify jobs into clusters on the basis of the skills and interests of the workers.

10. The student will construct the hierarchy for several occupational areas of his choice.

11. The student will compare and contrast the basic-education requirements of several career areas.

12. The student will evaluate his level of proficiency in basic learnings.

13. The student will select courses which will increase his proficiency in basic learnings.

14. The student will identify and select the school subjects which contain the specific knowledge required for his tentative vocational choice.

15. The student will, after exploring several occupational areas, demonstrate a number of the basic skills needed in the performance of certain jobs.

16. The student will determine the skills needed for a variety of occupations.

17. The student will participate in a variety of work experiences (simulating, working, observing) in broad occupational areas and analyze these experiences in terms of a future career choice.

SELF
Behavioral Objectives
(6-8)

1. The student will identify and evaluate his self characteristics which will help him in terms of the occupation he thinks he may wish to pursue.

2. The student will analyze how a positive self concept is reinforced through satisfaction with his work and/or from the value others place upon his work.

3. The student will analyze his abilities and interests in terms of occupational areas he may wish to enter.

4. The student will demonstrate an understanding of his interests and abilities through his course selection and work performance.

5. The student will identify and practice attitudes and behaviors which generally apply to any work situation.

6. The student will analyze the working environment of various occupations and evaluate his attitudes toward these work environments.

7. The student will analyze the changes which have taken place in his value system as he moves toward maturity.

8. The student will give examples of significant values inherent in various occupational areas.

9. The student will analyze his values in terms of how they relate to personal work behavior, work situations, and occupations.

10. The student will explore the possible ways in which his contribution to the world of work may be most effective.

11. The student will identify how others contribute to the world of work.

12. The student will assess his self characteristics in terms of various occupations.

13. The student will analyze how his perceptions of other people affect his ability to work cooperatively and identify any changes he wishes to make.

14. The student will give examples of interpersonal relations of workers that affect cooperative performance on a job and assess his ability to work in a similar situation.

SOCIETY
Behavioral Objectives
(6-8)

1. The student will differentiate between broad occupational areas in terms of the contribution and importance of these areas to our society.

2. The student will analyze how the customs, traditions, and attitudes of society affect jobs in broad occupational areas.

3. The student will analyze how societal needs create a demand for workers in various occupational areas.

4. The student will analyze the relationship between the benefits provided by society and the work performed by the members of the society.

5. The student will investigate the protective laws of several broad occupational areas and determine whether present laws are meeting the needs of producers and consumers.

ECONOMICS
Behavioral Objectives
(6-8)

1. The student will discuss and generalize that work in various occupational areas contributes to the nation's wealth which can be measured in terms of goods and services produced annually.

2. The student will explore the economic incentives offered by various occupational areas.

3. The student will identify and analyze the characteristics of the American economy that affect job opportunity.

4. The student will analyze economic decisions and choices made as a participant in either economic simulations or actual situations.

5. The student will explore how economic needs and wants differ and are provided for by the rewards of various occupational areas.

6. The student will identify economic trends, both past and present, and investigate their effect on job opportunities in broad occupational areas.

7. The student will investigate the geographical factors that affect various occupational areas.

TECHNOLOGY
Behavioral Objectives
(6-8)

1. The student will research and demonstrate how man uses resources and technology creatively in his work.

2. The student will analyze how technology is used creatively to develop various products from natural resources.

3. The student will explore the technology of various occupations and evaluate the benefits which have accrued to man.

4. The student will use the technologies of several broad occupational areas in a simulated or an actual work situation, relating them to the satisfaction of man's needs and desires.

5. The student will analyze various jobs in broad occupational areas to see how technology has changed them.

6. The student will evaluate the impact on work and leisure time by withdrawing and by augmenting technology in occupational areas of his choice.

7. The student will examine and evaluate technology in terms of the factors which give impetus to change and development.

8. The student will assess the degree to which the technology of various occupational areas is being used to the advantage of mankind.

9. The student will analyze the problems associated with the use of technology and research the proposed solutions to these problems.

OCCUPATIONAL
Behavioral Objectives
(9-12)

1. The student will select educational and training programs in terms of his needs, interest, abilities, and values that will assist him in converting vocational preference into reality.
2. The student will make projections of work people may some day be doing.
3. The student will formulate a personal definition of work.
4. The student will analyze his vocational choice and the possible careers which he might pursue in terms of his interest, abilities, and chances for success.
5. The student will analyze the degree to which hobbies and interests affect his present career choice.
6. The student will cluster a group of jobs reflecting his career choice and identify his career choice and identify his clustering criteria.
7. The student will analyze the career hierarchy which reflects his vocational choice.
8. The student will apply basic learnings in a work situation and analyze their effects upon his job performance.
9. The student will meet the requirements for successful completion of his basic course work for job entry or further education.
10. The student will evaluate his proficiency in the specific skills related to his career interests.
11. The student will demonstrate basic vocational skills which will qualify him for an entry level job or for further education in an occupational area of his choice.
12. The student will participate in a realistic work situation as part of the school program or as a worker in the community.
13. The student will evaluate his career choice in terms of his work experience.
14. The student will project his needs for vocational retraining in relation to job advancement, job change, and job loss.
15. The student will interpret occupational trends and evaluate his transferable skills and knowledge that will facilitate retraining.

SELF
Behavioral Objectives
(9-12)

1. The student will analyze the ways his self concept affects his entrance and performance in a work situation.

2. The student will evaluate his tentative career choice in terms of ways it will contribute to the maintenance of a positive self concept.

3. The student will project a career plan which will reflect his abilities and interests.

4. The student will evaluate his attitudes and behaviors and their effect on his functioning in his work situation.

5. The student will demonstrate the attitudes and behaviors which enable him to obtain and hold a job.

6. The student will analyze the impact of his environment of his feelings toward work and weigh these attitudes against his career plans.

7. The student will develop a profile of the working environment of his career choice.

8. The student will evaluate the role that his values play in making his career choice.

9. The student will analyze his contribution to a specific work situation.

10. The student will evaluate his individual contribution as it affects future career choice.

11. The student will conduct an evaluation of self-characteristics using as a basis his cummulative work experiences and analyze this evaluation in terms of future implication.

12. The student will observe the interaction of co-workers in situations which call for cooperation and determine any changes he might need to make in order to work effectively.

13. The student will analyze how his perception of other people affect his ability to work cooperatively.

SOCIETY
Behavioral Objectives
(9-12)

1. The student will analyze the effects on a society when the workers of an occupational area withhold their services and debate the justification for such action.
2. The student will explore the effect of changing customs, traditions, and attitudes in relation to his chosen career area.
3. The student will assess how future societal needs may affect vocational opportunity in the career area of his choice.
4. The student will make a critical analysis of the reward structure of an occupational area as it relates to the reward system of the larger society.
5. The student will evaluate the laws society has enacted for his protection as producer and consumer of goods and services.

ECONOMICS
Behavioral Objectives
(9-12)

1. The student will evaluate a career area in terms of its contribution to the nation's productivity.
2. The student will identify and evaluate the economic incentive available in a career area in terms of his goals.
3. The student will assess the extent to which economic characteristics may affect work opportunities in the career area of his choice.
4. The student will evaluate his application of economic concepts in making choices and decisions as a consumer and/or producer.
5. The student will evaluate how the career area of his choice will provide for his economic needs and wants and affect his standard of living.
6. The student will assess how economic fluctuations may affect the job opportunities in the career area of his choice.
7. The student will evaluate his career choice as it is affected by geographical factors.

TECHNOLOGY
Behavioral Objectives
(9-12)

1. The student will use resources, technology, and his creative ability to investigate and develop a project related to the career area of his interest.

2. The student will explain how the forces of resources, technology, and creative ability interplay in the career area of his interest.

3. The student will employ the technology of his career interest area and assess its contribution to the satisfaction of man's needs and desires.

4. The student will evaluate the extent of which technological change may affect the employment opportunities and the task requirements of his occupational choice.

5. The student will make inferences about how technology may affect his work and leisure time in his career choice.

6. The student will develop his own action-oriented program to correct situations arising from the misuse of technology.

7. The student will analyze the development of technology in the Twentieth Century in terms of its escalation.

8. The student will investigate how the technology of his career area can be more effeciently used to contribute to man's well being.

WORK SHEET GUIDE

STEPS TO INFUSE CAREER EDUCATION INTO CURRICULUM

1. Decide the curriculum area in which you will be working.
2. Select a unit that you will be teaching in the area.
3. If necessary, further divide the unit into sub units of 5-10 days duration.
4. Determine the purpose of each unit by writing an objective of it.
5. Determine which of the 15 clusters you will focus on. (one or more)
6. Select a career objective(s) from any of the five areas that can be incorporated into the unit.
7. Keeping the Career Education objective(s) clearly in mind, list lesson topics that you will need to teach in order to get the unit objective over to the students.
8. Write a learning objective for each lesson. This objective should tell that you expect the students to be able to do when they have finished the lesson.
9. For each lesson, list the learning activities that you would have the students do.

WORK SHEET

Curriculum Area____

Teaching Unit____

Statement of Unit Objective_______________________________

____

Career Education Cluster_________________________________

Career Education Objective_______________________________

____

Lesson Topics____

____

____

____

Learning Objectives of Topics

Lesson 1____

Lesson 2____

Lesson 3____

Lesson 4____

ACTIVITY SHEET

Lesson Topic Number____

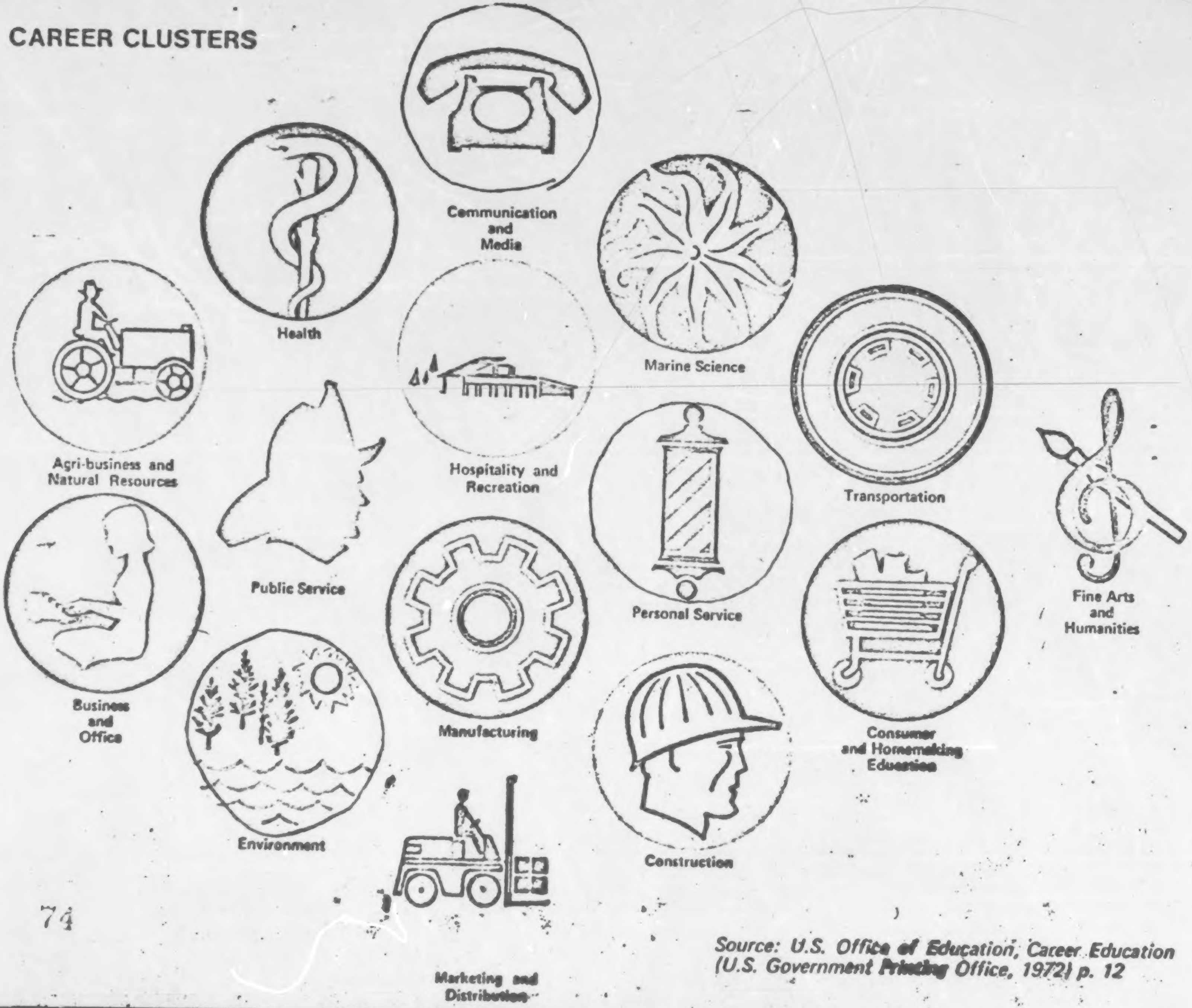
Learning Objective of Topic________________________________

____

Activities:

CAREER CLUSTERS

CAREER CLUSTERS


Communication and Media
Health
Marine Science
Agri-business and Natural Resources
Hospitality and Recreation
Transportation
Public Service
Personal Service
Fine Arts and Humanities
Business and Office
Manufacturing
Consumer and Homemaking Education
Environment
Construction
Marketing and Distribution

Source: *U.S. Office of Education, Career Education (U.S. Government Printing Office, 1972) p. 12*

JOB CLUSTERS

Clustering is an attempt to organize the 25,000 jobs in the United States into a manageable, understandable system. The attached 15 clusters, although not containing all jobs, are a means of relaying the wide scope of careers available in any one interest area. Within each cluster are careers that require a variety of skills and training.

1. Personal Services

Rationale: Careers which supply specific services that are purchased or obtained to fulfill a particular need or desire of a person.

beautician
shoe repairman
social worker
insurance agents
refrigeration, air conditioning and heating mechanics
babysitter
priest
missionary
furniture upholsterers
barber
cleaner and laundry manager
TV repairman
telephone operator
radio repairman
minister
rabbi
mortician
tailor

2. Health Services

Rationale: Careers related to the determination of health problems, physical caring for the problems and exploring possible preventive measures.

psychologist
doctor
orderly
practical nurse
occupational therapist
medical secretary and librarian
veterinarian
dentist
optometrist
pharmacist
podiatrist
laundry and sterilizer
osteopath
psychiatrist
nurse
x-ray technician
nurse's aide
laboratory technician
hospital administrator
chiropractor
dental technician
anestesiologist
dental hygienist
speech pathologist
bacteriologist

3. Construction

Rationale: Careers related to building.

mobile home builder
architect
plumber
plasterer
mason
bricklayer
printer
surveyor
paperhanger
pipefitter
engineer
draftsman
carpenter
electrician
industrial designer
excavator
cabinet worker
cement mason
roofer
heavy equipment operator

4. Manufacturing

Rationale: Careers which create a product.

machine operator
machine maintenance
electronic engineer
assembly line operator
mobile home assembler
industrial designer
sheet metal worker
skilled tradesman
tool and die operator
chemist
welder
mechanical engineer
industrial traffic manager

5. Transportation

Rationale: Careers related to the movement of people and things and improvement of or care for the necessary equipment.

truck driver
pilot
body and fender repairman
traffic control manager -airlines
brakeman
locomotive engineers
service station managers and attendants
auto mechanic
bus and taxi driver
aerospace engineer
conductors
station agents

6. Agri-Business and Natural Resources

Rationale: Careers related to the productive use of land.

farmer
dairyman
feed store manager
miner
soil conservationist
agricultural engineer
agronomist
petroleum engineers
rancher
butcher
farm equipment sales
farm agent
fish and game manager
mining engineer
petroleum and natural gas production workers
farm manager
poultrymen
wildlife manager

7. Public Service

Rationale: Careers which provide a service for individuals, some of which are tax supportive.

kindergarten-elementary teacher
state policeman
janitor
certified public accountant
school administrator
food and drug inspector
court recorder
lawyer
counselor - school, employment, rehabilitation
refuse collector
junior and senior high teacher
government service
civil engineer
fireman
librarian
urban planner
court bailiff
city policeman
military
nursery school teacher
probation officer

8. Environment

Rationale: Careers related to the protection, improvement of and proper use for the surroundings that influence a life.

forest ranger
gardener
landscape architect
biologist
horticulturist
park ranger
range manager
recycling operator
naturalist
forestry aides
geologist
tree surgeon
camp counselor
meteorologist
fish and game warden
environmental engineer
geophysicist

9. Hospitality and Recreation

Rationale: Careers which enhance leisure for mankind.

stewardess
restaurant manager
social directors
waitress
restaurant hostess
travel agent
waiter
short order cook
steward
cook
chef
golf pro
dietician
cashier
swimming pool manager
baker
hotel-motel manager
athlete

10. Fine Arts and Humanities

Rationale: Careers related to the cultural and esthetic improvement of human life.

professional musician
dancer
author
literary writer
music critic
art critic
actress
conductor
sign painter
music director
stage designer
cartoonist
singer
playwright
music arranger
fashion designer
commercial artist
music teacher
poet
piano technician
radio and TV director
actor
composer
film editor
orchestra leader
jewler
free-lance artist
singing teacher
floral designer
orchestrator
sculptor

11. Communications and Media

Rationale: Careers related to the transmission of information.

journalist
technical writer
audio-control technician
proofreader
staff programmer
sound engineer
script writer
radio-TV announcer
electronic technician
lighting technician
foreign correspondent
sportscaster
maintenance technician
reporter
newswriter
transmitter technician
photoengraver
printer
photographer
video technician
lecturer

12. Marketing and Distribution

Rationale: Careers which facilitate the development and economic movement of a product.

salesman
statisticians
packaging and designer
marketing researcher
consumer product seller
systems analyst
sales engineer
economists
production and control position
sales supervisor
wholesale and retail distributors

13. Marine Science

Rationale: Careers related to the understanding, exploration and commercial uses of the sea.

marine biologist
seaman
commercial fisherman
physicists
aquatic biologist
marine geologists
geophysicists

14. Business Office

Rationale: Careers related to the efficient management of the business community.

office manager
personnel director
advertising workers
data processor
computer operator
public relations worker
trailer salesman
bank teller
receptionist
stenographer
computer programmer
bookkeeper
accountant
key punch operator
secretary
purchasing agent
file clerk
bank management

15. Consumer and Homemaking Education

Rationale: Careers related to the purchase and proper use of products for the home.

interior decorator
appliance demonstrators
home demonstration agent
price control agents
milliner
drapery maker
credit interviewer
seamstress
fashion coordinators
model
extension agent
homemaker
home economist
nutritionist

APPENDIX D

K-12 PERFORMANCE OBJECTIVES FOR TEACHERS

GRADE LEVEL: Kindergarten

COMPONENT: K-5 Awareness

The career awareness focus begins with a very narrow base at the kindergarten level. The emphasis is on the work found in and around the home. That is, the work of members of the family and work that is performed by outsiders who enter the home for service repairs.

SUGGESTED TREATMENTS:

(1) Curriculum INFUSION
Performance Objective(s) The student will:

A. Talk about one work activity that is performed by any member of the family or others who work in or near the home or family. (Society)

B. Construct one ten (10) page book consisting of pictures of workers. (Occupation)

C. Identify and explain two (2) ways in which the work of others helps him/her. (Society)

D. Identify and explain two (2) kinds of activities in which he/she likes to be involved. (Self)

E. Given a picture of several common items the student will circle the two (2) articles which cost most and discuss relative costs of other items. (Economics)

F. Given cans of different diameters, the student will arrange the cans in some order and explain the order involved. (Might use blocks of about same shape, but differing size and color in place of cans.) (Technology)

G. After looking in a full-length mirror, the student will orally describe his/her physical characteristics, such as height, eye color, hair color, approximate body weight, etc. (Self)

(2) Career Education FIELD TRIPS
Performance Objective(s) The student will:

A. Have an opportunity to take one (1) field trip during the school year.

B. Be able to ask a worker one (1) question about their work.

(3) Career Education GUEST SPEAKERS
Performance Objective(s) The student will:

A. Have four (4) relatives of the students volunteer to come into the class to talk about their work.

B. Be able to identify one (1) task that any worker may be required to perform on the job.

C. Given a graphic representation of people in several different occupations found in the community, the student will explain orally how one person helps the community.

GRADE LEVEL: First Grade

COMPONENT: K-5 Awareness

At the first grade level, the focus is on the occupations held by parents, grandparents, older siblings, uncles, aunts, cousins, etc. Attempts should be made to get the children to interact with members of the family about their occupations. The emphasis should be on a beginning awareness of the many roles people play.

SUGGESTED TREATMENTS:

(1) Curriculum INFUSION
Performance Objective(s) The student will:

A. Describe five (5) ways in which he is like older workers. (Self)

B. Be able to discuss his/her main hobby and interest. (Self)

C. Tell of five (5) ways in which the work of others helps him/her. (Society)

D. Be able to describe three (3) different jobs in their community. (Occupational)

E. Be able to list three (3) job tasks that his/her parents do on their job. (Occupational)

F. Be able to tell why his/her parent(s) work and what their money is used for. (In general terms) (Economics)

G. The child will be able to demonstrate how common tools are used to get a job done. (Technology)

(2) Career Education FIELD TRIPS
Performance Objective(s) The student will:

A. Have an opportunity to take one (1) field trip during the school year.

B. Be able to ask workers two (2) questions about their work.

C. Cite two examples of how several workers depend on one another to do their job.

(3) Career Education GUEST SPEAKERS
Performance Objective(s) The student will:

A. Invite his/her parents or relatives (40% of parents) into the class to talk about their work.

B. Be able to identify worker skills, tools, and materials needed to perform a task about their work.

C. Be able to list three (3) jobs that he/she is interested in.

GRADE LEVEL: Second Grade

COMPONENT: K-5 Awareness

Second grade students broaden their horizon by investigating the roles of workers in the immediate community. For many children, they can be involved in walking field trips to businesses located close to the school. The emphasis should be on developing an awareness that large numbers of people are involved in producing goods and services for others.

(1) Curriculum INFUSION
Performance Objective(s) The student will:

A. Cite three (3) examples of how he/she differs from peers. (Self)

B. The student will identify attitudes and behaviors which help him and others perform a task. (Self)

C. Identify the value of being able to interact with others. (Society)

D. Describe and identify three (3) different occupations. (Occupational)

E. Be able to identify the academic skills needed for three (3) different occupations. (Occupational)

F. The student will identify his basic economic needs and wants and discuss the ways these are provided. (Economics)

G. The student will be able to identify and discuss the different ways people use tools and materials in the accomplishment of tasks and the production of products. (Technology)

(2) Career Education FIELD TRIPS
Performance Objective(s) The student will:

A. Have an opportunity to take one (1) field trip during the school year.

B. Be able to ask workers three (3) questions about their work.

C. Cite three (3) examples of how several workers depend on one another to do their job in their community

(3) Career Education GUEST SPEAKERS
Performance Objective(s) The student will:

A. Have an opportunity to listen to 4-15 guest speakers.

B. Construct three (3) different model tools used by workers in various occupations.

GRADE LEVEL: Third Grade

COMPONENT: K-5 Awareness

Occupations of a multi-community nature are the concern of third grade students. Defining multi-community will vary from community to community. In some cases, it will mean the entire city rather than only a certain section. In other cases, it may mean a small number of towns within a county. Other instances will dictate that multi-community includes more than one county. The concern should be in the selection of occupations which exist in various sites within the multi-community framework.

SUGGEST TREATMENTS:

(1) Curriculum INFUSION
Performance Objective(s) The student will:

A. Name three (3) factors that determine personal satisfaction in his/her school work (Self)

B. Be able to write a paragraph about a job he would like to have. (Self)

C. List five (5) factors that can make him/her successful in school. (Society)

D. The students will identify and discuss the ways societal groups reqard their members for their work. (Society)

E. The students will demonstrate that hobbies and interest combine elements of both work and play by providing examples of their own hobby or interest. (Occupational)

F. The students will be able to explain how Language Arts and Mathematics are used in three (3) different occupations. (Occupational)

G. Be able to explain how the work of many men has made possible a continuing increase in goods and services produced in our country. (Economics)

H. Be able to conduct a project and explain the technology needed to complete the task. (Technology)

(2) Career Education FIELD TRIPS
Performance Objective(s) The student will:

A. Have an opportunity to take one (1) field trip during the school year.

B. Be able to ask workers five (5) questions about their work.

C. Be able to describe the relationship between effective personal relationship and success on the job taken from the field trip experience.

D. Be able to list three (3) main occupations found in this community.

(3) Career Education GUEST SPEAKERS
Performance Objective(s) The student will:

A. Have an opportunity to listen to 6-15 guest speakers.

B. Be able to identify worker skills, tools, and materials needed to perform a task in five (5) different jobs.

GRADE LEVEL: Fourth Grade

COMPONENT: K-5 Awareness

For the fourth grade student, the emphasis is on occupations which are peculiar to the state and/or found throughout the state. This involves utilizing maps and materials available from various departments within the State Department. The goal is not to get the children to eventually move to other parts of the state but to make them aware of future options in the career world in terms of the encompassing nature of the world of work.

SUGGESTED TREATMENTS:

(1) Curriculum INFUSION
Performance Objective(s) The student will:

A. The student will be able to identify his/her interests and abilities and relate them to three (3) possible occupations. (Self)

B. Be able to write three (3) short stories that describe his interest and abilities toward work and success. (Self)

C. Be able to list three (3) sources of personal data about himself. (Self)

D. Be able to describe the social value of five (5) different occupations. (Society)

E. The student will trace the historical development of an occupational area that interest him/her (Occupation)

F. The student will classify workers into occupational areas and characterize them as producing goods or services. (Occupation)

G. The student will identify geographical factors; i.e., climate, topography, resources, location, etc. of the State and how they affect work. (Economics)

(2) Career Education FIELD TRIPS
Performance Objective(s) The student will

A. Have an opportunity to take one (1) field trip during the school year.

B. Be able to ask workers seven (7) questions about their work.

C. Be able to explain three (3) key differences between a work day in school and in industry.

(3) Career Education GUEST SPEAKERS
Performance Objective(s) The student will:

A. Have an opportunity to listen to 6-15 guest speakers.

B. Be able to list five (5) career opportunities in his community.

C. Be able to list five (5) career opportunities located in other parts of Indiana.

GRADE LEVEL: Fifth Grade

COMPONENT: K-5 Awareness

Fifth grade students become involved in careers of a national stature. It is important that children understand that in many career areas, they will have the opportunity and option of employment in many geographical location, and leisure time activities. This does not mean that the student should be encouraged to move from the state later but the approach does allow for additional options. The student may at this point in time explore careers on an international level.

SUGGESTED TREATMENTS:

(1) Curriculum INFUSION
Performance Objective(s) The student will:

A. The student will be able to relate his/her interest and abilities to four (4) specific occupational roles. (Self)

B. The student will be able to list five (5) habits/attitudes that will help him/her get along with other people. (Self)

C. The student will discuss how the changing needs of the society affect job opportunities. (Society)

D. The student will write three (3) reports (written-oral) that compares an occupation in this town with a simular occupation found in another part of the United States. (Occupational)

E. The student will be able to explain "job family" and identify ten (10) of the 15 job clusters. (Occupational)

F. The student will be able to identify three (3) careers that require an interest in and knowledge of ______________ (Occupational)
(Subject Matter)

G. The student will investigate economic conditions which affect the number and variety of jobs available. (Occupational)

H. The student will develop a project applying his/her educational skills and describe how he/she used technology to accomplish the task. (Demonstration Speech) (Technology)

(2) Career Education FIELD TRIPS
Performance Objective(s)

A. To have an opportunity to take one (1) field trip during the school year.

B. To ask workers seven (7) questions about their work.

(3) Career Education GUEST SPEAKERS
Performance Objective(s) The student will:

A. To have an opportunity to listen to 6-15 guest speakers relating information on careers located in other parts of the continental U. S.

B. To identify seven (7) career opportunities located in other parts of the continental United States.

C. To list three (3) rewards of work in terms of its social value.

GRADE LEVEL: Sixth Grade

COMPONENT: 6-8 Exploration

The Career Exploration phase continues to emphasize the goals which have been partially achieved during the awareness state. Greater emphasis is placed on broader exposure to all levels of occupations. Some "real-life" exploratory experiences are provided. Additional emphasis is placed on ability and aptitude testing and relating these attributes to present concerns and future potential. The realities outside the classroom are investigated through people oriented field trips to business and industry, the community and other organizations and agencies.

Students are exposed to people who represent many walks of life. Resource people are invited to the classroom to interact with students about "official data", for example, job title, job description, educational requirements, salary range, etc. However, children and youth are also very interested in asking questions about "official data", for example, do you think your work is important? How does your work affect your life away from the job? If you were to start over, what kind of work would you do?, etc.

The intent of the Exploration phase is to provide career experiences related to the academic and general education courses. Occupations which require knowledge of the academic or general education subject are selected from the following clusters for inclusion into the course.

SUGGESTED TREATMENTS

(1) Curriculum INFUSION
Performance Objective(s) The student will be able:

A. The student will be able to prepare a list of school subjects he/she is most competent in and relate them to one (1) or more occupations he/she is interested in. (Self)

B. The student will be able to write a short paper (one to two pages) story about his/her career goal and discuss it with their parents. (Self)

C. The student will be able to list three (3) reqards of work in terms of its social values. (Society)

D. The student will be able to list three (3) occupations that show a relationship to each of the following school subjects: Language Arts, Social Studies, Science, and Mathematics. (Occupational)

E. The student will identify and analyze the characteristics of the world economy that affect job opportunity. (Economics)

F. The student will research and demonstrate how man uses resources and technology creatively in his work. (Technology)

(2) Career Education FIELD TRIPS
Performance Objective(s) The student will be able:

A. To have the opportunity to take one (1) field trip during the school year.

B. Be able to ask workers nine (9) questions about their work.

(3) Career Education GUEST SPEAKER
Performance Objective(s) The student will be able:

A. To have an opportunity to listen to 8-12 guest speakers during the school year.

B. To prepare a two (2) page report on each of the following five (5) career clusters: Agriculture and Natural Resources, Business and Office, Communication and Media, Transportation, and Construction.

(4) Worker OBSERVATION
Performance Objective(s) The student will be able:

A. Participate in one (1) job observation day being able to list (a) employer expectation of the worker, (b) company fringe benefits, (c) personal work habits needed for the job, (d) the required education, training and experience, and criteria for advancement.

GRADE LEVEL: Seventh Grade

COMPONENT: 6-8 Career Exploration

SUGGESTED TREATMENTS

(1) Curriculum INFUSION
Performance Objective(s) The student will:

A. Describe three (3) occupations which he/she finds interesting and relate these to his/her personal characteristics, interest and aptitudes. (Self)

B. Campare and contrast the basic eudcation (and skill) requirements of three (3) occupations of interest to him/her. (Occupational)

C. Explain how economic needs and wants differ and how they are provided for by the rewards of several different occupational areas. (Economics)

D. Show ways or examples of how societal needs create or decrease a demand for workers in various occupational areas. (Society)

E. Analyze various jobs in one (1) broad occupational area to see how technology has changed it and demonstrate his findings.

(2) Career Education FIELD TRIPS
Performance Objective(s) The student will be able:

A. To have an opportunity to take one (1) field trip during the school year.

B. To have an opportunity to ask workers ten (10) questions about their jobs.

(3) Career Education GUEST SPEAKERS
Performance Objective(s) The student will be able:

A. To have an opportunity to listen to 8-12 guest speakers during the school year.

B. To prepare a two (2) page report on each of the following five (5) career clusters: Environment, Fine Arts and Humanities, Health, Recreation and Hospitality, and Manufacturing.

(4) Worker OBSERVATION
Performance Objective(s) The student will:

A. Participate in one (1) job observation day being able to list (a) employers expectation of the worker, (b) companies fringe benefits, (c) personal work habits needed for the job, (d) the required educational training and experience, and criteria for advancement.

GRADE LEVEL: Eighth Grade

COMPONENT: 6-8 Career Exploration

SUGGESTED TREATMENTS:

(1) Curriculum INFUSION
Performance Objective(s) The student will:

A. Describe, orally or in writing, a tentative educational plan which will provide him/her options for several possible occupations. (Self)

B. List three (3) occupations directly related to the following school subjects: Music, Physical Education, Science, Social Studies, Speech, and English (Occupational)

C. Analyze the problems associated with the use of technology and, after researching one particular problem, describe several possible solutions to the problem with some indication as to potential advantages and disadvantages of each solution (Technology)

D. Investigate the protective laws of several broad occupational areas and explain for at least one of these broad areas, whether present laws are meeting the needs of producers and consumers. (Society)

E. Describe the geographical factors that affect several occupational areas. (Economics)

(2) Career Education FIELD TRIPS
Performance Objective(s) The student will be able:

A. To have an opportunity to take one (1) field trip during the school year.

B. To be able to ask eleven (11) questions about their work.

(3) Career Education GUEST SPEAKERS
Performance Objective(s) The student will be able:

A. To have an opportunity to listen to 8-12 guest speakers during the school year.

B. To prepare a two page report on each of the following five (5) career clusters: Marine Science, Marketing and Distribution, Personal Services, Consumers, and Homemaking Education, and Public Service.

(4) Worker OBSERVATION
Performance Objective(s) The student will:

A. Participate in one (1) job observation day being able to list: (a) employer expectations of the worker, (b) company fringe benefits, (c) personal work habits needed for the job, (d) required education, training and experience, and criteria for advancement.

(5) Individual and Group Sessions With Counselor
Performance Objective(s) The worker will:

A. Identify and select educational and training programs in terms of his needs, interest, abilities, and values that will assist him in converting vocational preference into reality.

B. Be able to obtain a listing of the vocational course offerings available to him in their local school corporation.

C. Have an opportunity to take an interest survey, i.e., Ohio Vocational Interest Survey (OVIS), Kuder, etc., and to gain the results through meaningful interpretation.

GRADE LEVEL: Ninth Grade

COMPONENT: 9-10 Investigation

INVESTIGATION IS ESSENTIAL TO THE DEVELOPMENTAL PROCESS

SUGGESTED TREATMENTS:

(1) Curriculum INFUSION
Performance Objective(s) The student will:

A. Make application for a social security card. (Self)

B. Describe how three (3) different high school extra-curricular activities might relate to his/her tentative occupational choices. (Society)

C. Use resources, technology, and his/her creative ability to investigate and develop a project related to a project related to a career area of his/her interest. (Technology)

D. Identify and evaluate the economic incentives available in a career area in terms of his/her goals. (Economics)

E. Describe, in writing, three (3) things learned in school which have helped him/her in accomplishing some project or undertaking outside of school. (Occupational)

(2) Career Education FIELD TRIPS
Performance Objective(s) The student will:

A. Visit the local employment service on one occasion during the school year.

B. Have an opportunity to take one field trip during the school year.

(3) Career Education GUEST SPEAKERS
Performance Objective(s) The student will:

A. Have an opportunity to listen to 8-12 guest speakers.

(4) Worker OBSERVATION
Performance Objective(s) The worker will:

A. Participate in one (1) job observation day being able to list: 1. Employer expectations of the worker, 2. Company fringe benefits and general pay range, 3. Personal work habits needed for the job and 4. Required education, training and experience and criteria for advancement.

GRADE LEVEL: Tenth Grade

COMPONENT: 9-10 Tnvestigation

INVESTIGATION IS ESSENTIAL TO THE DEVELOPMENT PROCESS

Career cluster investigation better prepares students to identify interest, assesspotential, and make informed decisions regarding their immediate goals.

SUGGEST TREATMENTS:

(1) Curriculum INFUSION
Performance Objective(s) The student will:

A. From a list of ten (10) working enviroments, list the three (3) environment, in order of priority, in which he/she would feel most comfortable working, as indicated by his personal characteristics. (Self)

B. Identify and list seven (7) occupations which require strong academic background in each of the following: 1. Math 2. English 3. Social Studies 4. Science 5. Music 6. Business 7. Foreign Language 8. Home Economics 9. Health and Physical Education 10. Industrial Arts. (Occupational)

C. Analyze the effects on society when the workers of an occupational area withhold their services and debate the justification for such action. (Society)

D. Evaluate how the career area of his/her choice will provide for his economic needs and wants and how it may affect his/her standard of living. (Economics)

E. Discuss how technology may affect his/her work and leisure time in the career area of his/her choice. (Technology)

(2) Career Education FIELD TRIPS
Performance Objective(s) The student will:

A. Visit the local employment service on one occasion during the school year.

(3) Career Education GUEST SPEAKERS
Performance Objective(s) The student will:

A. Have anopportunity to listen to employment service personnel to gain a better understanding of their role and function.

B. Have an opportunity to listen to eight (8) to twelve (12) guest speakers.

(4) Worker OBSERVATION
Performance Objective(s) The student will:

A. Participate in at least two (2) job observation days.

(5) Individual and Group Sessions With Counselor
Performance Objective(s) The student will:

A. Role-play three (3) job interviews with either teacher, counselor, or job placement people.

B. Conduct one (1) personal interview with officers of trade: industrial, commercial, professional, and labor organizations.

C. Identify and select educational and training programs in terms of his/her needs, interest, abilities, and values that will assist him in converting vocational preference into reality.

GRADE LEVEL: Eleventh Grade

COMPONENT: 11-12 Career Experience

SUGGESTED TREATMENTS:

(1) Curriculum INFUSION
Performance Objective(s) The student will:

A. Discuss, in writing, his/her ideal work environment including at least eight (8) environmental factors (such as noise, people, space, etc.) and what plan he/she has for attaining that ideal work situation. (Self)

B. Evaluate the laws society has enacted for his/her protection as producer and consumer of goods and services and specifically how this might affect his/her chosen occupational area. (Society)

C. Collect educational and career information from at least five (5) different sources including (as one source) at least three (3) letters to firms, organizations, and institutions related to his/her chosen Career area. (Occupational)

D. Assess the extent to which economic characteristics may affect work opportunities in the career area of his/her choice. (Economics)

E. Analyze the misuse of technology and develop and action-oriented program to correct a specific misuse of technology. (Technology)

(2) Career Education FIELD TRIPS
Performance Objective(s) The student will:

A. Visit the employment service on one (1) occassion during the school year.

B. Have the opportunity to take one (1) field trip during the school year.

(3) Career Education GUEST SPEAKERS
Performance Objective(s) The student will:

A. Have an opportunity to listen to employment service personnel in order to gain a better understanding of their role and function.

B. Have an opportunity to listen to 8-12 guest speakers.

(4) Worker OBSERVATION
Performance Objective(s) The worker will:

A. Participate in at least two (2) job observation days being able to list the employers' worker expectations, company's fringe benefits, personal work habits necessary for success on the job, needed education, training, experience, and advancement.

(5) Job PLACEMENT
Performance Objective(s) The student will:

A. Make application for summer time or part-time employment using the described procedure.

B. Twelve to 17% of the students at the 11th grade level will be placed in a part-time job.

GRADE LEVEL: Twelfth Grade

COMPONENT: 11-12 Career Experience

CAREER PREPARATION IS ACHIEVED THROUGH SUCCESSFUL EDUCATIONAL AND TRAINING EXPERIENCE

Sequential career education prepares students for entering either post-secondary education or useful and reqarding employment.

SUGGESTED TREATMENTS:

(1) Curriculum INFUSION
Performance Objective(s) The student will:

A. Describe, in writing, (relative to education, job observation, work experience, and personal work skills, preferences and aptitudes) his/her occupational goals and plan for achieving them successfully. (Self)

B. Prepare a research report concerning manpower projections and other key factors related to his/her future employment in a chosen broad occupational area. (Society)

C. Prepare three (3) letters of job application and one (1) job resume. (Occupation)

D. After listening to or participating in a panel discussion concerning present consumer protection legislation and procedures, deviate the impact of such consumer protection in practical terms of the consumer. (Economics)

E. Investigate how the technology of his/her chosen career area can be more effectively and efficiently used to contribute to the well being of all members of society.

(2) Career Education FIELD TRIPS
Performance Objective(s) The student will:

A. Visit the employment service on one (1) occassion during the school year.

B. Have the opportunity to take one (1) field trip during the school year.

(3) Career Education GUEST SPEAKER
Performance Objective(s) The student will:

A. Have an opportunity to listen to employment service personnel in order to gain a better understanding of their role and function.

(4) Worker OBSERVATION
Performance Objective(s) The student will:

A. Participate in two (2) job observation days per year being able to list the employer's expectations, company's fringe benefits, personal work habits, necessary for success on the job, needed education, training experience, and advancement.

(5) Job PLACEMENT

Performance Objective(s) The student will:

A. Make application for part-time and full-time work using the suggested procedure.

B. Eighteen - 20% of the students at the 12th grade level (in the experimen group) will be placed in part-time for full-time jobs prior to June 1, 1

APPENDIX E

CAREER EDUCATION IDEAS FOR TEACHERS

CAREER EDUCATION IDEAS

Art

1. Have students paint or draw a self-portrait and emphasize self-awareness and self-concept.
2. Emphasize leisure-time activities inherent in art projects.
3. Draw or paint pictures of workers or work scenes.
4. Plan a display of tools, hats, and uniforms of various workers.
5. Make a mural showing progress of a certain product from beginning to consumption.
6. Have students research personal characteristics of people in art oriented or related jobs. SRA booklet "Jobs in Art" could be used as resource.
7. Conduct an art show and have students assume roles of workers in a show (i.e. show director, gallary director, set-up people).
8. Have students find examples of commercial art work around them (on t.v., magazines, newspaper ads, brochures).
9. Have students develop a commercial ad for newspaper ad (with cooperation of local newspaper it could actually be used).
10. Locate and point out to students artistic elements of the design of local buildings (relate art to architecture).
11. Have students develop an art display for an art sale.
12. Develop a calendar using art works or illustrations by the students (each student could design a page).
13. Relate design of products such as jewelry to art.

CAREER EDUCATION IDEAS

English

1. Have students write an autobiography and suggest that they emphasize strengths and areas for personal growth.

2. Role play some value conflict situations.

    a. within the individual
    b. between workers
    c. between the worker and the organization

3. Have students compare the nature of sections of newspapers of magazines they read. Try to reflect on the type of newspapers of magazines they read. Try to reflect on the type of workers to produce each section.

4. Use observations and interviews made during a field trip to develop personality requirements for various work roles. Ask the students to project themselves into worker roles. Filmstrip "Trouble at Work" by Guidance Associates could be used.

5. Have students survey others (parents, teachers, workers and others) to determine how they rank the various rewards of work.

6. Debate whether a job is an expression of your personality or whether the job tends to create a certain type of personality.

7. Have students develop skits on various work settings, i.e. an assembly line, a sales conference, a hospital ward, a construction site. Discuss the talents or skills that seemed necessary to carry out the various roles.

8. Have capable students review the Kuder or other Interest Inventory Manuals and report to the class.

9. Have the students study the occupations seen on TV movies and other media. Have the students record what is desirable, e.g. adventure, power, status, income, etc.

10. Have students interview older people, such as grandparents, as to their view of hard work. Compare with views held by younger people. Could be used with filmstrip "The Tuned Out Generation" by Guidance Associates.

11. Compare the effects of competition and cooperation in the classroom. For example, assign one-half the class a small group report and the other half individual reports. Grade some on a group basis and some individually. Discuss the relative success of each method, the feelings generated, and the amount of competition and cooperation in our society.

12. Write an "Occupational Epitaph" for your tombstone.

13. Write a composition on "My Life in Ten Years."

CAREER EDUCATION IDEAS

Home Economics

1. Select one career shown on the home economics career development charts and calculate the costs of preparing for that job.

2. At the beginning of a foods unit discuss food service jobs students have observed in school cafeteria, in restaurants, in establishments such as hospitals or nursing homes.

3. Develop a skit on home economics career opportunities for men and women to be presented at FHA meeting.

4. Prepare a list of homemaking tasks and responsibilities. Discuss which of these could also be used for wage-earning.

5. Conduct a community survey to determine current rates or pay for such home economics related jobs as daily child care, housecleaning, garment construction and alterations, and cake decorating. Also find out the maximum amount people would be willing to pay for such services.

6. When taking a field trip identify as many jobs as possible which make some use of home economics knowledge and skills.

7. Analyze what personal and financial resources you have that could be used to achieve your selected occupational goal.

8. Set up an assembly line for accomplishing such FHA projects as making stuffed toys, packing gift baskets for senior citizens, etc.

9. Brainstorm on hobbies which could be developed for wage-earning. Find out if there would be a market for such items in your community. (Examples might include macrame for wall hangings, shoulder bags or other accessories, knitting or crocheting for shrink-tops or other garments, etc.)

10. Investigate community services and agencies relating to family welfare that exist in your community or within your country.

11. Calculate work-related costs (time, energy, money, training, effect on family) for:

    a. young married woman without children
    b. mother of pre-school children
    c. mother of school-age children
    d. mother of grown children
    e. single-parent family

CAREER EDUCATION IDEAS

Mathematics

1. Have students compute the costs of future education on a yearly basis.

2. Have students convert various ways of paying salaries, i.e. hourly wages, monthly wages, percentage commissions, yearly wages.

3. Have sub-committees within a class examine the various types of pay check deductions.

   a. FICA
   b. U.S. Withholding Tax
   c. North Dakota Withholding Tax
   d. Other - insurance, union dues, savings bonds, etc.

4. Develop a real or mock investment club.

5. Have students use anonymous student records to develop expectancy tables for predicting school and post high school grades. Develop basic data tabulations and percentages.

6. Discuss the chance factor in predicting outcomes in behavior.

7. Play "What's My Line - A Math Occupations Game." Use math and have each student give an example of how a person in that occupation would use the application of a math skill and have a panel guess the occupation.

8. Graph various economic indices such as the stock market averages, the gross national product, percentage or unemployment, and other economic data reported in the media. A good source of information is U.S. News and World Report and Business Week magazines.

9. Have the students compute the costs of getting a job through a private employment agency.

10. Collect articles from newspapers and other media that show the wage settlements of various unions etc. Compare these with figures on the cost of living.

11. Have students graph the growth of labor unions from 1900 to the present.

12. Have students poll their parents to see what types of math they use in their jobs and how often they must use it.

13. Assign occupational titles to math problems or student activities.

14. Study the earnings gap between men and women over a ten year period. Source of information: 1969 Handbook on Women Workers.

CAREER EDUCATION IDEAS

Physical Education

1. Have students video tape sports activities and events and discuss this as possible career.

2. Role play physical abilities needed in various occupations.

3. Discuss effects of drugs, alcohol and tobacco use on success in careers.

4. Have students plan a community summer recreation program complete with personnel and facilities needed.

5. Have students identify leisure time activities and compare them with physical education activities.

6. Have students create a bulletin board depicting careers requiring extensive phyiscal training or conditioning.

7. Seek resource people whose jobs require physical training.

8. Assign responsibility roles for getting room and/or equipment ready for physical education activity. Point out that responsibilities are similar to many occupations.

9. Use warm-up exercises to emphasize proper lifting procedures necessary for many work roles.

10. Set up some decision-making exercises or situations involving first aid.

11. Develop hand-eye coordination tasks that could be compared to needs in an occupation.

CAREER EDUCATION IDEAS

Science

1. Discuss with class what occupations have been created and made obsolete by machines.

2. Discuss or have students research jobs that are open to the blind or partially blind.

3. Record noise in a variety of occupational settings. Discuss with class how the noise level in various situations affects worker mood and function.

4. Discuss the differences and similarities in skills, aptitides, interests, training time, pay, work-environment and prestige between an electrician and an electrical engineer.

5. Discuss what would happen to industrial processes without electricity.

6. Bring out skills and aptitides while demonstrating settings on a microscbpe. Indicate how finger dexterity and motor coordination contribute to the manipulation of instruments.

7. Have students perform tasks with simulated disabilities. Discuss disabilities and their effects on adult life.

8. Study the major technological problems of today and then suggest occupations which might help alleviate them.

9. Place an occupational title on each of the laboratory experiments or experiences. Make sure the problem fits the occupation.

10. Make comparisons between weather forcasting and predicting the behavior of groups of people, i.e. grades in school, job success, etc.

11. Have students search the want ads in the newspaper and report how many and which ones are science related. This could be an on-going activity.

12. Relate safety rules of the laboratory with those of work roles in industry.

13. Set up a committee to scan the news media for new products or services announced throughout the year. As they report periodically, discuss the effects on occupational opportunities.

14. Ask the students to evaluate the working conditions of their science lab and have them indicate whether or not they'd like to work under those conditions as an adult.

15. Have students research technological advances or worker productivity which have resulted in more leisure time.

16. Discuss the difference between heredity and enviroment and their effects on choosing a career.

CAREER EDUCATION IDEAS

Social Studies

1. Set up mini government emphasizing the work or role of elective or appointive officials. (Could be state, local, federal, or all three.)

2. Set up a mock court complete with judge, jury, court reporter, guard, lawyers and have a constitutional issue as the case.

3. Set up a mock corporation complete with officers, board of directors, stock holders and have them solve some problems or conduct vote by stock holders.

4. Have students obtain their social security cards.

5. Organize the class into a "nation" and set up a constitution for the "nation".

6. Have the warden of the state pen talk to the class about operation of parole board and the function or responsibility of the people involved.

7. Have a Welfare worker talk to the class about the rise in Welfare and thus a rise in number of workers in Welfare Department.

8. Simulate the draft lottery system and discuss or ask for written response to the decisions that would result. Girls could draw for their "husbands".

9. Have students identify jobs that require geographical mobility - i.e. local firm versus national firm, small firm versus chain store migrating workers.

10. Have students write a theme on "What I Think The Job World Will Be Like Twenty Years From Now."

11. Have Employment Service workers talk about the effects of business cycles and changing technology on employment opportunities.

12. Have a committee report on child labor laws.

13. Discuss the implication of the crash of '29 and the depression of the 1930's on workers.

14. Conduct a poll of students' occupational aspirations. Discuss the results in term of a "balanced economy", employment trends, and occupational requirements.

15. Have a committee of students construct a bulletin board showing the classification of jobs according to the Occupational Outlook Handbook.

CAREER EDUCATION IDEAS

Vocational Education

1. Develop a slide-tape presentation to be used to orient younger students to what skills and opportunities are available in the Vocational Education curriculum. Could be used as a pre-registration session for students or as motivation or exploration for younger students.

2. Select sample problems and situations from the high school Vocational Education curriculum and put them into a "hands-on" exploration in the Bocational Education area unit to be used with younger students.

3. Identify specific skills taught in the Vocational Education curriculum and emphasize with students the career opportunities that each presents.

4. Identify and emphasize basic skills that are taught in other subject areas as they relate to the skills in Vocational Education.

5. Compile a business industry directory for field trips to observe vocational skills in action.

6. Compile a resource person directory. This should consist of people in occupations that utilize the skills taught in Vocational Education.

7. Set up a mock garage complete with mechanic, partsman, welder, bookkeeper, small engines.

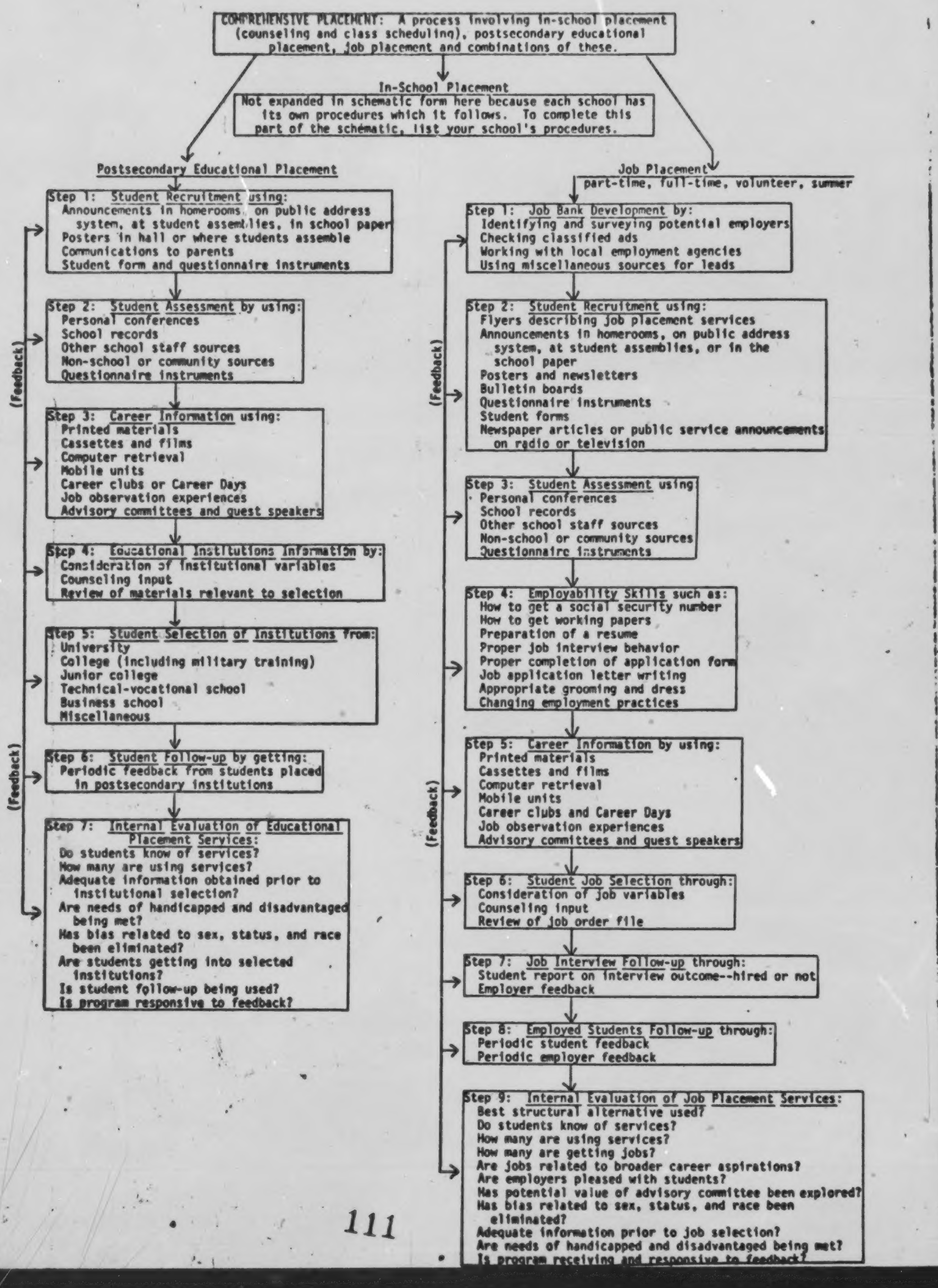
8. Role play the various sales and service occupations and bring out ability, knowledge and interest needed i.e. chemical salesman, fertilizer salesman, seed salesman, machinery salesman, crop farmer, farm credit representative, crop insurance man.

9. Simulate the various occupations involved in livestock production and marketing i.e. rancher, auction market manager, auctioneer, buyer, yard workers, trucker, feeder, vet, feed salesman, order or commission buyer, slaughterer, butcher (meat cutter), inspector, packer, sales person. This activity could be handled in three groups: (1) production, (2) marketing, (3) processing.

APPENDIX F

SCHEMATIC OF THE
CAREERS RESOURCE PROJECT
COMPREHENSIVE PLACEMENT MODEL

SCHEMATIC OF THE CAREERS RESOURCE PROJECT
COMPREHENSIVE PLACEMENT MODEL



COMPREHENSIVE PLACEMENT: A process involving in-school placement (counseling and class scheduling), postsecondary educational placement, job placement and combinations of these.

In-School Placement

Not expanded in schematic form here because each school has its own procedures which it follows. To complete this part of the schematic, list your school's procedures.

Postsecondary Educational Placement

Step 1: Student Recruitment using:
- Announcements in homerooms, on public address system, at student assemblies, in school paper
- Posters in hall or where students assemble
- Communications to parents
- Student form and questionnaire instruments

Step 2: Student Assessment by using:
- Personal conferences
- School records
- Other school staff sources
- Non-school or community sources
- Questionnaire instruments

Step 3: Career Information using:
- Printed materials
- Cassettes and films
- Computer retrieval
- Mobile units
- Career clubs or Career Days
- Job observation experiences
- Advisory committees and guest speakers

Step 4: Educational Institutions Information by:
- Consideration of institutional variables
- Counseling input
- Review of materials relevant to selection

Step 5: Student Selection of Institutions from:
- University
- College (including military training)
- Junior college
- Technical-vocational school
- Business school
- Miscellaneous

Step 6: Student Follow-up by getting:
- Periodic feedback from students placed in postsecondary institutions

Step 7: Internal Evaluation of Educational Placement Services:
- Do students know of services?
- How many are using services?
- Adequate information obtained prior to institutional selection?
- Are needs of handicapped and disadvantaged being met?
- Has bias related to sex, status, and race been eliminated?
- Are students getting into selected institutions?
- Is student follow-up being used?
- Is program responsive to feedback?

(Feedback)

(Feedback)

Job Placement

part-time, full-time, volunteer, summer

Step 1: Job Bank Development by:
- Identifying and surveying potential employers
- Checking classified ads
- Working with local employment agencies
- Using miscellaneous sources for leads

Step 2: Student Recruitment using:
- Flyers describing job placement services
- Announcements in homerooms, on public address system, at student assemblies, or in the school paper
- Posters and newsletters
- Bulletin boards
- Questionnaire instruments
- Student forms
- Newspaper articles or public service announcements on radio or television

Step 3: Student Assessment using:
- Personal conferences
- School records
- Other school staff sources
- Non-school or community sources
- Questionnaire instruments

Step 4: Employability Skills such as:
- How to get a social security number
- How to get working papers
- Preparation of a resume
- Proper job interview behavior
- Proper completion of application form
- Job application letter writing
- Appropriate grooming and dress
- Changing employment practices

Step 5: Career Information by using:
- Printed materials
- Cassettes and films
- Computer retrieval
- Mobile units
- Career clubs and Career Days
- Job observation experiences
- Advisory committees and guest speakers

Step 6: Student Job Selection through:
- Consideration of job variables
- Counseling input
- Review of job order file

Step 7: Job Interview Follow-up through:
- Student report on interview outcome--hired or not
- Employer feedback

Step 8: Employed Students Follow-up through:
- Periodic student feedback
- Periodic employer feedback

Step 9: Internal Evaluation of Job Placement Services:
- Best structural alternative used?
- Do students know of services?
- How many are using services?
- How many are getting jobs?
- Are jobs related to broader career aspirations?
- Are employers pleased with students?
- Has potential value of advisory committee been explored?
- Has bias related to sex, status, and race been eliminated?
- Adequate information prior to job selection?
- Are needs of handicapped and disadvantaged being met?
- Is program receiving and responsive to feedback?

(Feedback)

(Feedback)

APPENDIX G

THIRD-PARTY EVALUATOR'S REPORT FOR THREE YEAR PERIOD 1973-1976

NED NEW EDUCATIONAL DIRECTIONS, INC.
a nonprofit service organization
BOX 307 CRAWFORDSVILLE, INDIANA 47933 (317) 362-8877

CAREERS RESOURCE PROJECT

Huntingburg, Indiana

THIRD PARTY EVALUATOR'S FINAL REPORT

for the period 1973-1976

June, 1976
OEG-0-73-5312

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INTRODUCTION

New Educational Directions, Inc., (NED), has served as third-party evaluators for the Careers Resource Project (CRP) since October, 1973. During CRP's first year of operation, NED's evaluation activities focused on project activities and administration. Process evaluation has continued to receive much attention throughout CRP's federally-funded life, but the assessment of student outcomes assumed a high priority at the beginning of CRP's second year. During 1974-75, NED and CRP took the necessary steps to prepare for a systematic assessment of career education's impact on students which was implemented in 1975-76.

Since July 1, 1975, NED has spent forty-one person days at CRP for the purposes of observing staff meetings and inservice sessions, interviewing and consulting with the staff, working with the staff in developing the evaluation system, and sharing observations and evaluation results. An additional 497.70 hours of professional and 131.33 hours of paraprofessional time were devoted to CRP in the NED offices. Major NED activities during CRP's final year have included the review and comment on several versions of CRP's implementation manual and job placement model and advice and counsel to the project director concerning efforts to secure continuation funding. Major efforts were also devoted to the development of student test instruments and teacher questionnaires and of software for their scoring and analysis. NED has issued monthly reports to the project director and the state monitor stating evaluation findings and recommendations, as well as an interim report summarizing CRP's progress toward project goals as of January, 1976.

CRP operations and NED's evaluation efforts have both benefitted from a close working relationship among NED, CRP, and the DPI monitor assigned to the project. Following is an overview of each of CRP's three years of federal funding and a list of recommendations for the benefit of individuals considering a project like CRP's. Subsequent sections have the period of July, 1975, to May, 1976, as the primary focus.

OVERVIEW OF YEARLY PROGRESS

First Year (1973-74)

CRP's first-year accomplishments were few. No progress was made toward the development of a rural career education model and little was made in the utilization of community resources or in the regionalization of schools' career education efforts. Inservice sessions were generally fragmented, activity-centered, and lacking in an articulated program framework. Similarly, any career education activities which resulted from such inservice were spotty and non-sequential at the individual classroom level, as well as at school- and corporation-wide levels. Materials lending services were utilized, but not heavily. The mobile unit, a newsletter, and public news releases resulted in fairly wide-spread community awareness of the project but anecdotal sources suggested that the educational community's response to CRP was not especially positive. Cooperation with the third party in evaluation activities was minimal, resulting in incomplete and inconclusive data concerning the project's activities or impact.

The negligible success of the first year can be attributed largely to an unstable administration; five different persons served as project director during the first twelve months of funding. The lack of strong leadership with State DPI backing resulted in a poorly unified staff, with each member acting independently, without coordination with other staff members, and without direction toward project goals. In addition, the staff had little or no career education background when hired and received inadequate training thereafter. Yet another stumbling block was a wide-spread leeriness among the local education community toward federally-funded projects.

Second Year (1974-75)

When compared to its first year, CRP's second-year progress was quite remarkable. In the early fall Robert V. Jervis of Anne Arundel County, Maryland, conducted a workshop for the CRP staff to present the infusion approach to career education. The curriculum infusion concept was immediately embraced by CRP as a viable approach in the rural setting and provided something of a program framework which had been altogether lacking in the previous year.

The change in approach also appeared to lead to greater acceptance of career education in the community, and CRP's inservice efforts resulted in the implementation of some career education activities in some classrooms. CRP's services still remained confined to a limited number of participating schools spread across the sixteen counties of the service area and few, if any, educators received what could be considered intensive assistance in developing career education programs.

Considerable efforts were made toward involving the community in career education, and a number of field trips, career days, and guest speaker engagements resulted. Several corporation advisory committees were established and the project also formed an advisory committee which met once during the year.

A second mobile unit was purchased in October and both units were used fairly extensively. CRP's materials-lending services resulted in an impressive amount of materials being placed in the hands of teachers and students.

The project's charge of model development was given serious consideration for the first time in a staff meeting during March of 1975. At that time the decision was made to choose three sites where CRP's services would be concentrated during the following year in order to develop separate models for incorporating career education into three school organizational structures: town, corporation, and county. Third-year staff assignments were made on this basis.

Although the staff remained somewhat remiss in the maintenance of records associated with their developmental responsibilities, they contributed greatly to efforts toward student outcome assessment in response to OE's request for such data. The staff devoted considerable energy to assisting NED in the development and field-testing of student questionnaires, which were later revised for use in the third year.

CRP experienced massive staff turnover at the beginning of the second year, but little occurred since. That a single project director served continuously throughout the year contributed to improved staff unity. Nevertheless, coordination of staff efforts toward the attainment of project goals remained a weak point in the second year. Staff training also remained inadequate, but plans were made to correct this situation during the summer of 1975.

Third Year (1975-76)

CRP has made substantial progress in the third year, particularly since the project was forced to start essentially from scratch less than two years ago.

More attention has been given this year to CRP staff training, with seven days during the summer of 1975 devoted to workshops conducted by experienced career education practitioners. CRP has also been represented at several conferences, and it is assumed that staff members engage themselves in professional reading. Nevertheless, it would be desirable in NED's opinion for the staff to expend more effort in continuous skill up-grading, as the speedy evolution of the career education movement nation-wide makes it particularly essential to keep pace with new developments.

Each CRP staff member has expended considerable energy this year in striving towards the goal of developing a replicable career education model for the rural setting. The plan established in March of 1975 to develop three models at three sites was abandoned the following summer in favor of the compilation of a manual for operating a rural regional service center for career education. The manual was begun early last fall, has undergone numerous revisions, and is presently approaching completion. However, NED is aware of no plans for the manual's dissemination.

Although the development of a placement model is not specified as a project objective, the major responsibility of a newly-hired staff member was to develop and field-test a model for work and educational placement for use by rural high schools. A model did result, but since its development involved a number of revisions of the original draft, no time remained for its field-testing.

"Model" as a project product was re-defined but the plan to concentrate efforts at three target sites remained unaltered so that these sites may establish ongoing career education programs which would serve as models to other schools. In the fall of 1975 one corporation reversed its decision to participate as a model site. In another corporation of fourteen schools, one elementary school succeeded in developing a program involving the majority of teachers. In spite of repeated CRP efforts to develop a permanent program in a high school in the corporation, little progress was made there. The third corporation consists of two schools. At both the elementary school and the junior/senior high school, several teachers became deeply involved in career education, but a school-wide program has not been established as yet.

Two consultants were assigned to each of the two participating model sites, where one team member specialized at the elementary level and the other at the secondary. This staff organization appeared to work well.

CRP services were well received in schools this year, and there is strong evidence that exposure to CRP has positively affected teachers' attitudes toward and knowledge of career education.

Results of student testing indicate that career education experiences have had a positive impact on third-graders' attitudes toward work, knowledge of occupations, and grasp of the relationship of workers to the child's daily life. At the sixth-grade level differences between career education and comparison groups were found in the areas of attitudes toward work, decision-making skills, and occupational information. No significant differences were found at grade 12, but at grade 9 the impact of career education can be seen in the areas of self esteem, attitudes toward school, and occupational information.

The project director devoted much attention to seeking funds for the continuation of CRP services in the coming year. There is reason for optimism that some continuation funds will be provided by the Indiana State Board of Vocational and Technical Education.

RECOMMENDATIONS

The following recommendations are based on NED's observations of CRP's three years of operation and are presented for the benefit of those considering the establishment of a project similar to the Careers Resource Project.

* Staffing is the greatest single determinant of success, and social skills are at least as essential as technical ones. Strong leadership from the project administration is especially important.

* Begin with realistic and measurable objectives, even if considerable revision of those stated in the funding proposals are necessary. Objectives may be revised from time to time in light of experience; if they are, change them formally and in writing.

* Plan all activities around objectives, assuring that all efforts are objective related and all objectives receive attention. The same applies to the allocations of financial resources.

* A project funded for the purpose of development or demonstration should keep this clearly in mind. Responsibilities to the funding agent and the national career education movement are easily overlooked by an enthusiastic staff highly involved in serving the local community.

* Staff training should be given high priority, even if experienced individuals are hired. The career education movement is developing fast; to keep abreast of new developments requires time and money for staff inservice sessions and professional reading. Attending state and national conferences is a good way to learn of new developments in the field without months and years passing before new ideas are formally disseminated. Even a project devoted to a particular career education approach should be aware of other approaches.

* A lengthy planning period should preceed any implementation. Ill-conceived actions carried out at the beginning of a project must later be undone before the project can start afresh. If this involves reversing an unfavorable reputation in the community, it will take many months to accomplish.

* Begin with intensive efforts at selected schools or grade levels and branch out after one or more model programs is developed. Be mindful of the concept of incremental improvement.

* Using professional personnel for clerical or delivery work is not cost-effective and should be avoided.

* Assess the needs and milieu of the community before investing major funds or efforts to any aspect of the program.

SUMMARY OF THIRD-YEAR ATTAINMENT OF PROJECTS' GOALS AND OBJECTIVES

CRP's goals and objectives do not lend themselves to the effective organization of an evaluation report, but must be addressed directly. Therefore, each goal (Roman numerals) is listed below with its associated process objectives (capital letters) and the level of their attainment is briefly discussed. Following sections contain more detailed information concerning CRP's services to schools and their impact on teacher attitudes and student outcomes.

I. IT IS EXPECTED THAT A CONCEPT OF CAREER EDUCATION WILL BE IMPLEMENTED IN PARTICIPATING MODEL SCHOOLS. THE CRP WILL:

A. Provide in-service programs and career development to teachers in participating model schools.

B. Be involved in program development and implementation with representative aspects of communities served by participating model schools.

C. Apply a three-phase approach to providing career information to the participating model schools.
   1. Inservice Training for Teachers and Administrators
   2. Classroom Implementation
   3. Evaluation

D. Assist in designing particular career education programs and activities for specific teacher needs as they fit in the sequence of instruction.

E. Career-education-oriented materials and equipment will be made available to model schools on a loan basis.

F. Assist participating model school corporations in the collection and development of their own career education materials by utilizing community resources.

CRP's inservice and consulting efforts have been concentrated in four participating model schools. About one-third of the time consultants spent in schools was devoted to the model sites and all teachers in these schools received some amount of inservice training through faculty orientations. In these schools CRP had repeated contact with 57 educators, 36 of whom represent a single elementary school. Formal inservice workshops and share days have been limited for the most part to teachers at grades 3, 6, 9, and 12.

With the assistance of local civic organizations and CRP, each of the two model corporations developed a community resource directory. The extent to which community resources were used in career education programs is not precisely known, but community involvement does not appear to be a hallmark of the career education efforts of CRP-area schools.

CRP's materials-lending services have been extensively utilized, but analyses were not performed by school, so the extent of utilization in model sites is unknown. Some model site teachers have developed materials and activities which have been shared with others. Since CRP professes curriculum infusion, materials development _per se_ should not and has not been a strong emphasis.

One school has made substantial progress toward building a school-wide program involving the large majority of teachers. In the other three schools, some individual teachers have developed and implemented comprehensive year-long programs in their respective classrooms, others have implemented a few discrete activities, and others have made no conscious effort to include career education in their instruction

II. A MODEL OF HOW CAREER EDUCATION WILL FIT INTO THE RURAL SETTING (K-12) WILL RESULT FROM THIS PROJECT. THE CRP WILL:

A. Develop plans and strategies for expanding the program to all levels (K-12) in a rural setting by developing models for town, corporation (school district), and county organizations.

B. Utilize regional and local mass media to further community understanding of career education activities.

C. Assist in fostering, wherever possible, increased understanding and cooperation between school agencies and community resources such as PTA, labor, Chamber of Commerce, etc.

CRP's interpretation of its model development responsibilities has been revised more recently than its objectives, so formal strategies were never developed for carrying out process objective A. Nonetheless, the development of a model in the form of an operational manual has been a major thrust of CRP's efforts this year. CRP experiences in leading the development of school programs at model sites are reflected in the manual, but separate models for three school organizational structures did not result.

Local newspaper and television coverage of CRP philosophy and activities has been considerable as documented in the project's final report.

CRP has worked with civic organizations, various state agencies, businesses, and PTA's to some extent. Whether this work will result in lasting understanding and cooperation between schools and these parties is unknown, but the assistance of several civic organizations and businesses is seen in community resource directories, guest speaker engagements, career days, and video-taped field trips.

III. PROJECT SERVICES WILL RESULT IN A GREATER UTILIZATION OF EXISTING SCHOOL AND COMMUNITY RESOURCES FOR PARTICIPATING MODEL SCHOOLS. THE CRP WILL:

A. Where feasible, assist participating schools in the establishment of a career education advisory committee made up of representatives from school, community, business, and industry.

Corporation advisory committees received the greatest attention during CRP's second year. One model site utilized an existing civic organization as an advisory committee this year, and the other also had an advisory committee, but this area has not been strongly emphasized due primarily to schools' low interest level in such groups.

IV. THROUGH STATE AND LOCAL EFFORTS, PARTICIPATING MODEL SCHOOLS WILL DEVELOP STRATEGIES TO SUPPORT AND CONTINUE CAREER EDUCATION PROGRAMS. THE CRP WILL:

A. Facilitate the exchange of teacher-developed materials (units, etc.) among schools.

B. Encourage joint participation in inservice (e.g., regional inservice meetings).

c C. Utilize school personnel who have been engaged in career education programs for inservice activities.

Teacher enthusiasm in several model schools makes the propagation of some career education likely. However, committal actions from school administrations, such as policy statements or the creation of a position of career education coordinator, have not taken place. That is, local support for career education is unlikely in the foreseeable future. State support may be forthcoming, but is not assured at this time.

Several share days were sponsored by CRP for third, sixth, ninth, and twelfth grade teachers. Sharing was primarily of ideas rather than of instructional units or materials, which is consistent with CRP's curriculum infusion approach to career education.

V. AN INFORMATION NETWORK WILL BE DEVELOPED FOR THE DISSEMINATION OF CAREER EDUCATION MATERIALS AND RELATED INFORMATION. THE CRP WILL:

A. Provide career-education-oriented materials and equipment, on a loan basis, to participating model schools.

B. Maintain a public relations program to include local news releases, brochures, and a center newsletter.

C. Encourage each participating model school or corporation to appoint a liaison person who will be responsible to coordinate the local efforts with the project.

Career education materials were lent extensively, but equipment lending was minimal. Several news releases were produced and the project's newsletters and brochure were widely disseminated.

Liaison persons were identified at model schools. The nature of their leadership roles is unknown to NED.

VI. AN INCREASE IN CAREER AWARENESS AND KNOWLEDGE AMONG STUDENTS IN THE MODEL SCHOOLS WILL RESULT FROM THIS EXPOSURE TO LOCAL CAREER EDUCATION PROGRAMS.

A. Model schools representative of the project area will be selected for evaluation of student change.

B. Assessment will be made at selected grade levels in model schools.

C. While maintaining services to currently-participating school corporations, intensified concentration of regional consulting services will be effected on a team approach basis in model schools.

D. A systematic articulated K-12 curriculum approach will be effected in model schools so as to provide students with similar career education treatments.

E. A control population will be informed of the results of evaluation activities on a regular basis.

F. Experimental and control populations will be informed of the results of evaluation activities on a regular basis.

G. Specific information (student data) will be gathered to show changes in achievement, attendance, values, etc., with the assistance of school administrators and teachers.

Systematic articulated K-12 career education programs were not implemented in any school corporation.

The assessment of student outcomes has received much attention this year and the CRP staff's contribution to these efforts has been invaluable. A review of commercially-available tests showed the need for locally-developed instruments. CRP worked closely with NED in developing the Careers Orientation Battery (COB), a series of instruments designed specifically for CRP's student outcome objectives. The staff was also instrumental in choosing classes for testing, securing school cooperation with the evaluation, disseminating test materials, training teachers in test administration, and sharing the results of each class with teachers. In some cases consultants themselves administered the tests to students.

The COB was administered to almost 1600 students in the fall of 1975, and to about 1900 in the spring of 1976. A relatively small proportion of these were in the analyses of student outcomes discussed later in this report. Such massive testing took place because of the unpredictability of the occurrence of career education activities and also because the tests proved a popular activity in many schools.

Each teacher whose class was administered the COR was provided a frequency distribution of his/her class's scores and a tally of response patterns to each item. NED policy prohibited the sharing of individual student scores with teachers, due to the experimental nature of the battery and the potential for misinterpretation of scores on some scales.

NED did not carry out its tentative plan to investigate changes in academic achievement or school attendance because it was judged that the expense of gathering such data would not be justified by the resulting outcome and because the problem of accessing student records was never fully solved.

VII. COMMUNITY SUPPORT AND DIRECTION WILL BE PROVIDED TO THE PROJECT BY AN ADVISORY COMMITTEE. THE CRP WILL:

A. Establish an advisory committee of representatives of the participating model schools to offer advice and counsel to the project. Schools other than model schools may have representative membership.

CRP's advisory committee met as a group on one occasion this year. The meeting was poorly attended and a NED observer noted no evidence that the group was functioning in an advisory capacity. However, the project director reports having made frequent contacts with individuals on the committee for the purpose of drawing on their personal areas of expertise.

VIII. PROJECT WILL BE ACCOUNTABLE FOR IMPLEMENTING ITS GOALS.

A. Accountability will be established through internal auditing and third-party evaluation focusing on outcome objectives I-VII and their related process objectives.

This report documents the functioning of the third-party evaluators. Communications between CRP and NED have been excellent and the staff has cooperated well in evaluation activities.

CRP has benefitted from advise and counsel provided through frequent visits and the considerable efforts of its state monitor.

Internal auditing has been accomplished through almost-weekly staff meetings, monthly progress reports, activity logs, travel itineraries, and budgetary control. However, CRP has failed to adopt a systematic management-by-objectives policy.

IX. THE PROJECT WILL APPLY THE ABOVE GOALS AND OBJECTIVES TO SCHOOLS OTHER THAN THE MODEL SCHOOLS WHERE SERVICES ARE REQUESTED AND WHERE THESE SERVICES ARE ECONOMICALLY FEASIBLE.

Adherence to this plan is clearly evident. Consultants devoted about two-thirds of their in-school time to non-model schools. Also, repeated attempts at soliciting interest in CRP services were avoided this year; if the first or second contact with a school was not answered with a request for services, further efforts toward involving that school were held to a minimum.

SERVICES TO SCHOOLS

Assessment of the extent and quality of CRP services to schools was accomplished through four primary data sources:

(1) The CRP contact record (Appendix A), on which each consultant and the director recorded personal contacts with school personnel, including the names and positions of individuals visited, the duration of the visit, and the general nature or purpose of the contact. To the extent of NED's knowledge, these forms were conscientiously maintained by the CRP staff and reflect a reliable picture of the extent and types of services to schools. A summary of records covering the period of July 1, 1975, to May 14, 1976, appears as Table I.

(2) The Careers Resource Project Questionnaire designed jointly by NED and CRP to obtain educators' assessments of the quantity of and quality of CRP services in eleven areas. The questionnaires were mailed in mid-April, 1976, to individuals identified by CRP consultants as recipients of CRP services during the 1975-76 school year and were returned directly to NED through pre-paid postage envelopes. Results of the 135 respondents are summarized in Table 2.

(3) The materials check-out record system, designed and maintained by the CRP staff, summarized for the July to mid-May period in Table 3. NED has been advised that these records provide an under-estimate of the extent to which materials were borrowed by schools.

(4) Mobile unit logs, designed and maintained by the CRP staff. The number of days the mobile units were in use is judged as accurate. Summary analyses are shown in Table 4 for October 1, 1975, to May 14, 1976.

Consulting Services

During the 1975-76 school year the five consultants devoted almost one-third of their time to working directly with local educators. This figure does not include time spent in traveling from school to school. The consultants and project director together had personal contact with individuals from 104 schools and corporation central offices. Since it was decided that efforts should be concentrated in model schools and other schools desiring assistance, repeated attempts to elicit interest in the CRP program at uninvolved schools were avoided this year. Therefore, a number of the 104 schools were approached only once or twice. Personnel in other schools were positive toward the career education concept, but did not require extensive consulting services, or staff and budget limitations prevented CRP from providing them. Consulting services were concentrated in fifteen schools, each of which was visited ten or more times by CRP staff members. The most intensive services were received by four target schools, to which the staff devoted almost one-third of the total time they spent in schools.

Two-hundred-sixty-five educators received CRP inservice and consulting services on three or more occasions, which is believed to be a substantial increase from previous years. Most of these individuals are teachers, reflecting CRP's emphasis on classroom infusion as an approach to career education. Records show only eleven counselors with this relatively intense involvement with CRP. It may be advisable to increase future efforts with counselors, particularly at the secondary level; strengthening the career guidance components of a school career education program is likely to enhance, rather than detract from its curriculum infusion component.

In March, 1975, it was decided that the attainment of CRP's student outcome objectives would be assessed by testing students in selected schools from grades 3, 6, 9, and 12. Contrary to the intent of the evaluation design, the project administration made the decision to give first priority to teachers at these grade levels in the disbursement of release time funds. As a result, the large majority of teachers participating in CRP workshops and share days represented grades 3, 6, 9, and 12. NED sees this emphasis as conflicting with CRP's goal to build articulated K-12 career education programs.

Whereas significant progress was made in some schools toward initiating a school-wide program, there were no schools in which the entire faculty contributed to the development and implementation of a coordinated, sequential career education program. One school involved the large majority of the faculty, but for the most part educator interest and involvement in career education has been limited to a handful of teachers in each school.

Table I shows a breakdown of the 575 school contacts according to the primary purpose of visits. As is appropriate for a program in its third year, CRP has co-continued to provide workshops of an hour's to a day's duration, but has given greater emphasis to individual or small-group consultation as an instructional mode. The number of occasions on which CRP staff members observed or coordinated student activities is appropriately low; the emphasis placed on such services was sufficient to keep consultants in touch with students, but not so great as to indicate that consultants are assuming the responsibilities of teachers or counselors. Only those community contacts carried out for a specific school or corporation were recorded on logs; these results therefore represent an under-estimate of activities in this category.

TABLE I

ANALYSIS OF CONSULTANT SCHOOL CONTACT LOGS

Number of schools serviced = 104
Range of number of visits per school = 1-42
Number of schools visited ten or more times = 15
Number of educators contacted three or more times

Administrators = 46

Counselors = 11

Teachers = 208

TOTAL 265

Total consultant-hours spent in school contact = 1769

NATURE OF SCHOOL CONTACTS

Purpose of Visit	Number of visits	% of total visits
Planning (e.g., organize workshop, arrange field trip)	100	17
Orientation (introduction of career education to a large group)	58	10
Workshop (instruction for school personnel)	54	9
Consultation (instructional assistance for an individual or small group planning or carrying out career education)	124	22
Service (e.g., deliver materials or mobile unit)	176	31
Observation (e.g., of classroom activities)	15	3
Coordination of student activity (e.g., career day)	29	5
Community Contact (e.g., PTA, advisory committee, civic organization)	19	3
TOTAL	575	100

TABLE II

SUMMARY RESULTS OF EDUCATORS' EVALUATION OF CRP SERVICES*

Number of Respondents	
Teachers	85
Counselors	19
Administrators	25
Other	2
Total	135

Results are shown as the percentage of total respondents. "NA" indicates the item did not apply to the respondent.

	Amount of Assistance	Quality of Assistance
1. Explaining what career education is and why it is needed.	2 too much	39 excellent
	83 just enough	47 good
	7 too little	7 poor
	4 NA	4 NA
	3 omit	3 omit
2. Clarifying the relationships among career education activities, career education objectives, and your content area objectives.	3 too much	24 excellent
	70 just enough	51 good
	17 too little	15 poor
	7 NA	5 NA
	3 omit	5 omit
3. Suggesting specific techniques you can use to carry out career education in your school or classroom.	1 too much	29 excellent
	68 just enough	47 good
	23 too little	13 poor
	6 NA	6 NA
	2 omit	4 omit
4. Assisting you in developing your own career education strategies and materials.	1 too much	24 excellent
	62 just enough	41 good
	24 too little	17 poor
	10 NA	8 NA
	3 omit	9 omit
5. Lending career education materials.	1 too much	50 excellent
	76 just enough	32 good
	17 too little	11 poor
	4 NA	4 NA
	1 omit	3 omit
6. Lending audio-visual equipment.	-- too much	20 excellent
	44 just enough	29 good
	17 too little	9 poor
	36 NA	32 NA
	2 omit	10 omit

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*This questionnaire was administered by mail to individuals identified by the CRP staff as users of CRP services.

TABLE II (continued)

	Amount of Assistance	Quality of Assistance
7. Providing CRP mobile units for your use.	1 too much	29 excellent
	63 just enough	36 good
	17 too little	14 poor
	15 NA	13 NA
	4 omit	8 omit
8. Assisting you in making effective use of community resources such as guest speakers and field trips.	-- too much	13 excellent
	31 just enough	22 good
	30 too little	21 poor
	36 NA	33 NA
	4 omit	11 omit
9. Providing opportunities for sharing career education ideas with other educators.	-- too much	20 excellent
	56 just enough	38 good
	20 too little	15 poor
	22 NA	18 NA
	1 omit	9 omit
10. Assisting the corporation in the establishment and effective utilization of an advisory committee for career education.	1 too much	11 excellent
	33 just enough	22 good
	17 too little	15 poor
	44 NA	36 NA
	5 omit	16 omit
11. Assisting in the planning and coordination of your school's or corporation's overall career education program.	-- too much	15 excellent
	52 just enough	38 good
	15 too little	12 poor
	27 NA	23 NA
	6 omit	11 omit

One rather disturbing finding is that nearly one of three visits consultants made to schools had the PRIMARY purpose of delivery or pick-up of materials or the mobile units. This clearly constitutes ineffective utilization of large blcoks of professional time, particularly when the distances between schools in the CRP service area are considered. NED recommends that alternate delivery systems be investigated for the future. One possibility is the addition of one or more delivery persons to the staff, even if a consultant position must be eliminated. Before this is done, however, it would be advisable to calculate the cost-effectiveness of using U.S. Postal or United Parcel Services for most materials delivery. A third alternative is the regular scheduling of consultants' visits to schools so that delivery may be combined with services more commensurate with consultants' expertise and salary.

Fifty-eight faculty orientations to career education seems alarmingly many for a third-year project. However, some of these orientations were short "refresher courses" in schools previously involved with the project, whereas others were presented in schools where no progress had been made during the first two years. Very few, if any, of these orientations represented the first contact between a school and CRP. Twenty-three orientations were followed up by workshops or consultation, and several others resulted in the lending of materials or mobile units.

School staff who utilized CRP services generally rated both the amount and quality of those services positively (Table II). The vast majority of those indicating poor quality in a given area also indicated that the amount was too little; the bulk of "poor" ratings (of which there are relatively few) are therefore an indication that the respondent was disappointed in the limited availability of services.

Items 1-4 and 8-11 represent functions of the consultant. The first four are services which can be meaningfully delivered to educators as individuals; the last four require involvement of school faculties as a group. Services to individuals are rated quite highly, and few respondents considered these items inapplicable to their situations. Responses to the last four items are somewhat less positive and shed light on a dilemma for CRP. Some faculty members responded "too little" to these items, indicating a desire for more assistance in building a unified school- or corporation-wide program. However, a large number of individuals also responded "not applicable" to these items or omitted them; such responses may indicate that these educators are disinterested in school-wide program development and are satisfied with the implementation of discrete career education activities. It seems that involved educators, as well as the CRP staff, must work on the attitudes of the less-involved individuals before significant progress toward articulated career education programs can be achieved.

Some individuals offered written remarks on the mailed questionnaires. The following conclusions were drawn from the comments:

(1) Much career education is taking place in the CRP service area which does not directly involve CRP. In some cases, CRP's impetus is accredited for the initiation of programs, even though the school's recent contact with CRP has been minimal.

(2) A single unfortunate incident or misunderstanding can irreversibly "sour" an individual or even an entire school toward a service project such as CRP.

(3) Most educators who have utilized CRP services this year are very appreciative of the help they have recieved.

(4) Many teachers are awaiting a statement of administrative support before becoming heavily involved in career education.

Materials and Equipment Lending

CRP's audio-visual equipment was lent to schools on very few occasions this year, since most schools in the CRP service area own basic A/V equipment, and problems with user negligence were encountered in the first two years. When equipment was used in schools, it was generally operated by CRP staff making presentations to students and/or educators. The staff also used equipment in preparing video-taped field trips, several other A/V productions, and in developing materials for public relations and for teacher use.

An incomplete equipment inventory list includes: 7 tape recorders, 12 cameras, 4 slide projectors, 9 sound/slide and sound/film devices, a movie projector, 3 video-tape recorders, and 2 video-tape monitors. The staff's use of this equipment scarcely justifies the high cost of these items.

Since the bulk of hardware was purchased early in the project, when the purpose was to provide equipment to schools, this poorly-planned use of project funds does not reflect directly on CRP's third-year operations. It does, however, show the importance of assessing needs and anticipating difficulties before investing large amounts of project funds or human energy to any aspect of a program.

Materials lending was the CRP service most highly rated by educators (Item 5, Table II). An efficient materials inventory and inspection system was put into operation this year which minimized loss and damage and facilitated prompt responses to requests for materials. As indicated in Table III, items were checked out from the materials center 953 times, and this number does not include the several hundred items borrowed from the mobile units nor the almost daily use of materials on the mobile units. Consultants also made extensive and for the most part unrecorded use of materials for inservice presentations.

TABLE III
SUMMARY OF MATERIALS CHECK-OUT RECORDS

Note: This table does not include unrecorded check-outs or materials used on or borrowed from the mobile units.

Level	Type of Material	No in Stock	No. of Check-outs	No. Educators Served*	No. Students Served*	Total Estimated Cost	Frequency of Use of Items 0 times	1-5 times	6-10 times	10 times	Average Cost/ Check-out
K-6	Books	113	190	362	6,789	$ 1,200.	55	49	7	2	$ 6.32
	Career Kits	21	55	119	1,884	3,460.	4	14	3	0	62.91
	A-V Kits	46	114	207	5,208	5,795.	6	37	2	1	50.83
	Films	43	276	1,308	21,767	5,252.	1	11	31	0	19.03
	Miscellaneous	27	78	124	5,056	252.	1	23	1	2	3.23
	Total Elementary	250	713	2,120	40,704	$15,959.	67	134	44	5	$ 22.38
7-12	Books	200	63	87	2,165	$ 1,338.	154	45	1	0	$ 21.23
	Career Kits	36	25	85	1,880	3,532.	26	10	0	0	141.28
	Cassettes	133	25	36	1,521	3,344.	113	20	0	0	133.76
	Films	29	116	486	11,547	2,767.	0	22	7	0	23.85
	Miscellaneous	18	11	18	1,043	786.	10	8	0	0	71.45
	Total Secondary	416	240	712	18,156	$11,767	303	105	8	0	$49.03
GRAND	TOTAL	666	953	2,832	58,860	$27,726	370	239	52	5	$29.09

*Duplicated counts, derived from reports of individuals checking out materials.

Three-quarters of materials utilization was at the elementary level, reflecting the greater involvement in career education of these teachers when compared to secondary educators. Whereas a greater number of items are in stock for the secondary level, the distribution of expenditures in the two categories is more commensurate with the extent of utilization. By far the most popular medium at both levels is films; books are the least popular.

The final column of Table III shows cost calculations for the benefit of others considering establishing a regional career education materials center. The total cost of materials in each category was divided by the number of check-outs for the category to yield an average cost per check-out. The average cost is, of course, based on a single year's use of durable materials, and even this year's use is underestimated. On the other hand, these calculations do not account for personnel costs nor for the high costs of delivering materials to schools. It is clear that even a well-managed regional materials center such as CRP's is expensive, and that individuals planning to provide such services should make every effort to choose materials very selectively, preferably after local needs have been specified, and to provide very specific information to schools concerning what materials are available.

Mobile Units

As shown in Table IV, CRP's two mobile units were used extensively this year, on almost every school day when the units were not under repair. Indeed, the demand for the units at times exceeded CRP's capacity to provide them.

Units were used primarily as a direct service to students. A mobile unit was generally parked at a school for a day or several consecutive days, where students could use materials for personalized investigation. The nature and effectiveness of these experiences depended largely on the classroom teacher. Some classes were given specific assignments and were expected to report on their findings on a particular topic. For example, each student may choose a career cluster or an occupation and write a report answering a number of questions about the occupation, then later share the findings with the class. In other cases, the presence of the unit was simply announced to students, often in spite of CRP's efforts to instruct educators in the effective utilization of this resource.

The unit was also used by educators for inspecting and checking-out materials. When units were used for inservice presentations this year, it was generally to train teachers in effective mobile unit use.

Records show the units appeared at three public function, and the uniquely decorated vehicles are a highly visible trademark which foster public awareness of the project and perhaps of career education.

TABLE IV

SUMMARY OF MOBILE UNIT LOGS

	Mobile Unit I (large)	Mobile Unit II (small)	Total
Number of days in use between 10/1/75 and 5/14/76	79	82	161
Number of days used primarily by educators	10	20	30
Number of educators served (duplicated count)	570	511	1,081
Average number of educators served/ day of educator use.	59	26	36
Number of days used primarily by students	68	62	130
Number of students served (duplicated count)	4,032	2,220	6,252
Average number of students served/ day of student use.	59	36	48

CRP's IMPACT ON EDUCATORS' ATTITUDES AND PRACTICES

Reliable information concerning the career education activities which have taken place in schools unfortunately is lacking. NED suggested several techniques whereby teachers could systematically report career education activities carried out in their classrooms, but the CRP staff's experience indicated that this would be perceived as threatening to many educators and detrimental to the program. Since evaluation should not take priority over program goals, no further steps were taken to obtain systematic information of this type. Furthermore, CRP's basic approach to career education is curriculum infusion, which makes the identification of many career education "treatments" difficult because of the subtilty of differences between career education and other activities.

NED interviewed CRP consultants concerning the career education activities of students who were involved in student outcome assessment. Experiences of students judged by CRP as having received the most intense exposure to career education are described in the following section.

Indications from a variety of sources suggest that although articulated schoolwide programs have not been implemented as yet, a few teachers have carried out comprehensive year-long programs in their respective classrooms. A much larger number of educators have implemented one or several career education activities. Others have become more aware of career education but have not made conscious efforts to provide career education experiences to their students. As is often the case, considerably more career education is being done in lower grade levels than in higher ones.

In order to assess educators' attitudes toward and, indirectly, their knowledge of career education, NED and CRP jointly developed the teacher opinionnaire shown in Table V. The opinionnaire was distributed by the CRP staff to schools most heavily involved in CRP activities, with most returned opinionnaires coming from the four model schools. Each teacher in these schools was asked to complete the opinionnaire, whether or not he or she had personally utilized CRP services.

Responses to Item 21 provided the basis for assigning individuals into CRP user and non-user groups. About half the respondents reported having used CRP services.

The first 20 items were considered in computing total scores. Only the desirable response was considered correct; "no opinion" responses and undesirable responses were considered incorrect. Results showed that CRP users scored an average of almost three points higher than non-users. This difference is statistically significant at the .01 confidence level (t = 3.36; df = 86), showing that exposure to CRP has positively influenced teachers' attitudes toward career education and their understanding of it.

Response patterns to individual items demonstrate this even more clearly. CRP users responded more positively than non-users on every item, but CRP has been particularly successful in conveying the following attitudes: career education is appropriate for young children (item 1); career education does not force premature decisions about a student's future (item 4); career education does not require that all secondary instruction be occupationally oriented (item 5); career education has the potential of improving academic performance (item 12); career education can be infused into any subject area (item 13); female students have a particularly strong need for awareness of career opportunities (item 18); and career education is here to stay (item 19).

Very encouraging are responses to item 9, which indicate that most CRP users and non-users alike believe career education can be accomplished inexpensively. NED has used this item in a similar survey for a project much like CRP, and found that exposure to a funded project instilled the belief that career education is by nature a costly undertaking. The attitudes of CRP area teachers leave room for optimism that career education will be maintained when extensive CRP support is no longer available.

Somewhat disappointing, though, are responses to item 21, concerning the project's impact on classroom practices. Only 36 percent of CRP users report a direct influence on their activities. On the other hand, it is conceivable that those reporting an indirect or incidental influence are saying that as a result of their new awareness, they are infusing career education into their instruction, but in a natural, unstructured way.

TABLE V

TEACHER OPINIONNAIRE RESULTS

	CRP users	Non-Users	Total
Elementary	33	19	52
Middle School or Junior High School	1	0	1
High School	8	22	30
Central Office	0	5	5
Total	42	46	88

Total Scores on Items 1-20

	N	Mean	Standard Deviation
CRP Users	42	14.69	3.53
Non-Users	46	11.87	4.33

		% responding to item as keyed	
		CRP user	Non-user
1.	Career Education should first be introduced in early elementary school. (agree)	74	35
2.	Career education could be defined appropriately as: "The teaching of occupational skills needed for entrance into semi-skilled, skilled, or technical jobs." (disagree)	48	46
3.	It is important to involve parents and the community in the school's career education program. (agree)	90	83
4.	Career education results in students being forced to make decisions about their future at too early an age. (disagree)	83	57
5.	Career education proponents believe that every course a high school student takes should relate directly to his or her chosen occupation. (disagree)	93	72
6.	Career education results in a directing of students to meet manpower needs rather than the personal needs of the individual. (disagree)	88	63
7.	If I had had career education as a youngster, I may have made better decisions at some points in my life. (agree)	48	41

		% responding to item as keyed	
		CRP user	Non-user
8.	The major responsibility for career education in the school should lie with the guidance staff. (disagree)	62	61
9.	A successful career education program need not be costly. (agree)	79	76
10.	There is not enough class time to teach career education. (disagree)	55	46
11.	Family, friends, circumstances, and chance are such strong influences on a person's career that career education will probably have little effect on a student's future. (disagree)	76	50
12.	I think that including career education activities in the school curriculum can improve student achievement in the content areas. (agree)	67	50
13.	Career education can be taught in conjunction with any subject matter without getting away from the subject. (agree)	76	54
14.	Career education overplays the importance of work in the individual's personal happiness and fulfillment. (disagree)	69	61
15.	Our school system should try to send as many students to college as possible. (disagree)	69	63
16.	A student can benefit from talking to a person about his or her job, even if that particular job is of little interest to the student. (agree)	83	80
17.	Career education involves more than learning about jobs. (agree)	90	83
18.	I feel a particular responsibility to make my female students aware of the variety of opportunities open to them. (agree)	64	39
19.	Career education is another educational fad and will pass from the scene. (no)	69	46
20.	Assisting students in defining their values is in part the school's responsibility. (agree)	86	83

IMPACT ON STUDENTS

In September, 1974, the USOE strongly urged that Part D projects give high priority to the evaluation of the impact of career education on students. CRP and NED alike appreciated the need for evidence of career education's effectiveness and attempted to respond promptly to OE's request. Unfortunately, the OE guidelines for conducting student outcome evaluations were unusable at CRP when interpreted literally, and by the time NED secured clarification of OE intent, it was too late to implement an acceptable evaluation design during the 1974-75 academic year. However, plans were made during that time for student outcome evaluation in 1975-76. This planning included a search for a combination of commercially-available test instruments which reliably measure the student attributes which CRP was trying to develop. The search was unsuccessful and the decision was made to develop instruments locally.

The Careers Orientation Battery

In early 1975, NED and CRP jointly developed several draft instruments for grades 3 and 6 which were field-tested at CRP area schools. During the summer of 1975, NED, with much assistance from the CRP staff, used field-test results in developing the three forms of the Careers Orientation Battery--Experimental Edition (COB--Appendix B). Form 24 was designed for use at grades 2 to 4 and includes five scales. Form 58, for grades 5 to 8, consists of six scales, and form 912, with nine scales, was developed for grades 9 to 12.

CRP's student outcome objectives formed the basis for the COB's development. After each scale was compiled, the student outcome objective associated with it was reworded to reflect more accurately the student attributes actually measured by the items of the scale. These latter student outcome objectives in turn served as the basis for research hypotheses in the student outcome evaluation.

Several analyses of the COB scales were performed on pre-test results of almost 1600 students completing the COB in the fall of 1975 and results are presented in Appendix C as memoranda to the CRP project director. These analyses include means and standard deviations by sex and grade level, intra-scale correlations, internal consistency measures, a summary of teacher evaluations of the COB, and a description of the relationship between COB scores and grossly estimated reading achievement.

Very briefly, these analyses indicate low intra-scale correlations and little to no relationship between most COB scales and reading level. Item analyses show significant correlations of responses to virtually every item with its scale's total score, but Kuder-Richardson reliability coefficients show low internal consistency. Mean scores and variances are quite low; in some cases means are little above the guess rate. Thus, pre-test scores left sufficient room for measured improvement, but the COB may be insensitive to differences in the lower ranges of achievement of measured objectives.

Research Design

There are two general approaches to evaluating the impact of a career education project on students. One is to investigate the project's effects on the hypothetical average student in the project's service area. The research design associated with this approach involves a random or quasi-random sampling of students in the service area whose outcomes are compared to the same students' attributes before career education was introduced to the community or to the outcomes of some reference or comparison group. Results of this type of study indicate the actual impact the project has had on a typical student whose teachers and counselors have been given the opportunity and means to provide him career education experiences. However, a project staff has no direct control over the career education that actually takes place, so the career education experiences of the "experimental" group chosen by random sampling vary greatly from student to student, influenced primarily by the career education involvement of their respective teachers.

Therefore, NED prefers and uses a second general approach to student outcome assessment which introduces a degree of control over variations in student experiences. The research design involves identifying teachers whose instructional activities reflect the closest possible approximation to the career education model professed by the project. These teachers' students then become "experimental" groups, whose outcomes are compared to those of students with teachers who do not implement career education or do not implement career education to a great degree. Neither group is randomly selected per se, but if it can be assumed that both groups were drawn from the same pre-treatment population, evaluation results can be generalized to other groups in that population. Results of this type of study do not show the project's overall success in bringing about change in the service area. Rather, they indicate the effectiveness of the project's approach to career education when the career education model professed by the project is implemented.

The experimental design chosen as the most likely to yield definitive results requires pre- and post-testing with comparison groups at each of grades 3, 6, 9, and 12. Even eight months is a short period in which to demonstrate student growth resulting from career education, so it was vital to obtain pre-test data early in the 1975-76 school year. Two schools in one of the model school corporations had no plans for career education and agreed to provide comparison groups. However, the extent and nature of career education treatment most classes would experience was unpredictable at that time. In order to assure an adequate number of students in each group with "model" career education experiences and complete data, and also because COB-testing proved a popular classroom activity, a large number of students was pre-tested in September and October of 1975, and post-tested in May 1976.

As discussed in an earlier section of this report, the most reliable information available for describing career education activities was the observations of the CRP consultants working with each teacher. NED interviewed CRP consultants in May concerning the nature of the career education program implemented in each class involved in COB testing. Based on these descriptions, NED chose as experimental groups several classrooms at each of grades 3, 6, 9, and 12 where the most career education has taken place.

Comparison groups were identified in the fall, but NED confirmed in interviews that those students' teachers have not become involved in career education. Comparison groups were drawn from one elementary and one secondary school on the basis of the schools' willingness to cooperate in the evaluation. These schools serve neighborhoods of a somewhat higher socioeconomic status than experimental schools and are more suburban than rural. These factors apparently did not bias the results, however, as pre-test scores of comparison and experimental groups were very nearly equivalent on most scales.

Students who did not complete both administrations of all scales of the COB were eliminated from the study and the remaining students' pre- and post test scores were matched. The analysis of covariance was performed on raw scores of each scale, where the covariate was pre-test scores and the dependent variable was post-test scores. The research hypothesis in each case was that the experimental group's post-test mean exceeds that of the control group at the .05 confidence level, when post-test means are adjusted for pre-test scores. The analysis of covariance allows us to take into consideration random differences between experimental and control groups in their pre-test performance when determining whether post-test differences between groups are more likely to be due to chance along or to the different experiences of the two groups during the time since pre-treatment testing.

Grade 3 Treatments and Results

The control group consisted of students in three third-grade classes where career education was not implemented. Five classes from two model elementary schools comprised the experimental group. The five teachers were each involved in two to four formal CRP workshops and consulted with CRP consultants regularly. Consultants report four teachers infusing career education into their academic instruction to a moderate degree and the fifth to a very high degree. All students experienced the "Bread and Butterflies" series, as well as films conveying occupational information.

One class in which infusion was not heavily emphasized used 18 guest speakers and three other of these classes each had between three and five guest speakers. All but one class went on one or two field trips and two classes used the CRP mobile units and video-taped field trips. All three classes made extensive use of CRP-provided and self-developed materials and classroom activities included class projects related to hobbies and occupations.

TABLE V

GRADE 3 COB RESULTS--FORM 24

			Means						
Scale = Objective	Group	N	Pre	Post	Adjusted	SV	df	MS	F
Technology: The student will understand the relationship of various jobs to his/her daily job. (24 items)	Exp	136	15.79	19.68	20.12*	Between	1	3348.20	18.62
	Comp	69	10.58	11.29	10.42	Within	202	179.79	p<.001
						Total	203		
Self Esteem: The student will develop a positive attitude toward him/herself. (21 items)	Exp	136	13.38	16.25	16.05*	Between	1	129.37	1.156
	Comp	69	14.65	13.96	14.34	Within	202	111.89	NS
						Total	203		
Attitudes toward School: School activities will be perceived as satisfying and relevant to the student's personal needs. (19 items)	Exp	136	19.24	15.93	15.69*	Between	1	102.85	9.68
	Comp	69	14.58	13.71	14.19	Within	202	10.62	p<.005
						Total	203		
Attitudes toward Work: The student will develop desirable work attitudes. (17 items)	Exp	136	10.67	14.26	13.93*	Between	1	136.20	1.05
	Comp	69	11.28	11.54	12.19	Within	202	130.	NS
						Total	203		
World of Work: Students will be aware of the requirements for and nature of various jobs. (31 items)	Exp	136	17.94	20.15	20.18*	Between	1	522.00	32.23
	Comp	69	15.36	16.86	16.80	Within	202	16.19	p<.001
						Total	203		

Table V shows results of comparison between groups on the COB scale corresponding to each objective, including group means and analysis of covariance summary tables. Asterisks (*) in the adjusted mean column indicate which group scored higher on the post-tests.

The career education group scored higher than the comparison group on the post-test of all scales. Differences are statistically significant on technology, attitudes toward school, and the world of work. The third-grade career education program has therefore demonstrated success in developing a greater awareness of the world of work and its relationship to the student's daily life. Attitudes toward school declined through the course of the year, but in May students experiencing career education were more positive toward school than the comparison group.

Grade 6 Treatments and Results

The comparison group consists of four classes and the experimental group is comprised of all sixth graders at a model elementary school and the self-contained class of one teacher at a non-model school who was nevertheless highly involved in career education.

The model school has four teachers who teach all sixth graders in a departmentalized system. Two of these teachers agreed to discuss careers related directly to their subject areas, but were otherwise uninvolved in career education. The language arts and social studies teachers, on the other hand, implemented a relatively sophisticated infusion-based program, consulting weekly with their CRP consultant. For example, students wrote numerous "career information briefs," short reports on occupations, and a creative writing unit emphasized self awareness. Students organized a simulated radio station to deliver weekly bicentennial scripts on American presidents. A city government unit included the use of CRP's city government video-taped field trip and students developed a mock city government to renew a ghetto, which involved research of occupations and the sociological implications of class and race. The teacher in the non-model school also implemented an infusion-based program rated very highly by his CRP consultant. His students experienced two field trips and five guest speakers.

TABLE VI

GRADE 6 COB RESULTS--FORM 58

Scale: Objective	Group	N	Means Pre	Post	Adjusted	SV	df	MS	F
Technology:	Exp	123	13.43	14.91	15.00*	Between	1	15.16	2.40
Students will understand the influence of technology on American life. (24 items)	Comp	101	13.97	14.58	14.47	Within	221	6.32	NS
						Total	222		
Self Esteem:	Exp	123	14.93	15.29	15.19*	Between	1	11.44	1.44
The student will develop a positive attitude toward him/herself. (21 items)	Comp	101	14.57	14.60	14.73	Within	221	7.96	NS
						Total	222		
Attitudes toward School:	Exp	123	14.86	14.10	13.99	Between	1	5.02	.62
School activities will be perceived as satisfying and relevant to a student's personal needs. (19 items)	Comp	101	14.50	14.16	14.29*	Within	221		NS
						Total	222		
Attitudes toward Work:	Exp	123	19.74	20.70	20.56*	Between	1	37.80	3.91
Students will develop desirable work attitudes. (30 items)	Comp	101	19.12	19.56	19.73	Within	221	9.67	$p<.05$
						Total	222		
Decision-making Skills:	Exp	123	8.98	9.83	9.79*	Between	1	51.89	11.76
Students will develop career decision-making skills. (16 items)	Comp	101	8.60	8.76	8.81	Within	221	4.41	$p<.001$
						Total	222		
World of Work:	Exp	123	11.88	13.91	13.75*	Between	1	67.46	7.26
Students will be aware of the requirements for and nature of various jobs. (35 items)	Comp	101	11.25	12.46	12.65	Within	221	9.30	$p<.01$
						Total	222		

Sixth grade results are presented in Table VI. The experimental group scored higher than the comparison group on all scales except attitudes toward school; that difference was very small and far from statistically significant. Statistically significant results were shown on attitudes toward work, decision-making skills, and world of work scales. That is, students with career education experiences give thought to their futures, are aware of the most important factors to consider in career planning, and are familiar with the nature and requirements of a wide variety of occupations. The attitudes toward work scale measures a number of somewhat distinct attitudes such as the value of work and quality workmanship, the dignity of all productive work, the variety of reasons for working, and the belief that rewards should be earned rather than given away. Career education has also had a positive impact on attitudes such as these.

Grade 9 Treatments and Results

Four English classes in a school uninvolved in career education served as the comparison group. Experimental groups were drawn from the two model high schools. In each school, only one ninth-grade teacher incorporated career education into his or her instruction. One teacher infused career education into her English instruction to a moderate degree, primarily through occupational research reports where students chose occupations on the basis of aptitude scores. The other teacher used about twelve guest speakers in each class as well as three field trips. Students investigated occupations on an individual basis through CRP-provided audio-visual materials.

Even though experimental students did not experience what could be considered a comprehensive career education program, some positive effects of their experiences are evident in results on self esteem, attitudes toward school, and nature of jobs scales (Table VII). During the school year, the comparison group's attitudes toward school and self esteem declined, but both improved in the experimental group. Positive attitudes toward school may have resulted from their enjoyment of career education activities, as well as their increased understanding of the relevance of school. Being encouraged to consider their strengths for career planning may have enhanced self esteem. Career education also seems to have conveyed knowledge about the world of work in general and of specific occupations.

TABLE VII

GRADE 9 COB RESULTS--FORM 912

Scale: Objective	Group	N	Means Pre	 Post	 Adjusted	SV	df	MS	F
Technology:	Exp	75	11.64	12.08	12.00	Between	1	1.83	.23
Students will understand the relationships among technology, sociological change, and the world of work. (20 items)	Comp	36	11.17	12.11	12.28*	Within	108	8.06	NS
						Total	109		
Self Esteem:	Exp	75	7.41	7.89	7.94*	Between	1	16.93	5.07
The student will develop a positive attitude toward him/herself. (12 items)	Comp	36	7.75	7.19	7.10	Within	108	3.34	<p<.025
						Total	109		
Attitude toward School:	Exp	75	7.09	7.56	7.54*	Between	1	38.64	8.15
School activities will be perceived as satisfying and relevant to a student's personal needs. (12 items)	Comp	36	6.97	6.25	6.28	Within	108	4.74	<p<.005
						Total	109		
Attitudes toward Work:	Exp	75	18.12	18.76	18.89*	Between	1	2.23	.22
Students will develop desirable work attitudes. (30 items)	Comp	36	19.00	18.86	18.59	Within	108	10.16	NS
						Total	109		
Decision-making Skills:	Exp	75	8.19	8.65	8.78*	Between	1	.74	.16
Students will develop career decision-making skills. (16 items)	Comp	36	9.17	8.86	8.60	Within	108	4.49	NS
						Total	109		
Job Requirements:	Exp	75	30.07	30.81	31.03*	Between	1	17.43	.78
Students will be aware of the abilities, interests, values, personality traits, and education required for various occupations. (62 items)	Comp	36	31.14	30.64	30.18	Within	108	22.31	NS
						Total	109		

Scale: Objective	Group	N	Pre	Post	Adjusted	SV	df	MS	F
Nature of Jobs:	Exp	75	14.04	14.57	14.59*	Between	1	52.42	6.32
Students will be aware of the reasons for various methods and amounts of payment and of the relative income and working conditions of workers in various jobs. (26 items)	Comp	36	14.25	13.17	13.12	Within	108	8.29	$p < .025$
						Total	109		
Work Behavior:	Exp	75	2.33	2.39	2.42*	Between	1	1.59	.68
Students will recognize appropriate and inappropriate behavior in work situations. (6 items)	Comp	36	2.61	2.22	2.16	Within	108	2.34	NS
						Total	109		
Job Seeking Skills:	Exp	75	9.79	10.64		Between	1	8.07	1.10
Students will develop job-seeking skills. (21 items)	Comp	36	11.19	10.50		Within	108	7.37	NS
						Total	109		

Grade 12 Treatments and Results

The control group was drawn from four classes of a school uninvolved in career education. Experimental groups are from two model schools; only one twelfth-grade teacher at each school is involved in career education. One teacher made extensive use of field trips, averaging one every two weeks. About seven guest speakers visited his classroom, and a CRP consultant worked directly with his students in the area of self-awareness on several occasions. The other teacher emphasized guest speakers but the number who visited his classroom is unknown.

Results, presented in Table VIII, show no significant differences between comparison and career education groups at the twelfth-grade level.

TABLE VIII
GRADE 12 COB RESULTS--FORM 912

Scale: Objective	Group	N	Means			SV	df	MS	F
			Pre	Post	Adjusted				
Technology	Exp	78	13.40	14.56	14.66*	Between	1	.55	.10
	Comp	74	13.70	14.64	14.54	Within	149	5.66	NS
						Total	150		
Self Esteem	Exp	78	8.28	8.47	8.44	Between	1	5.76	2.45
	Comp	74	8.16	8.80	8.83*	Within	149	2.35	NS
						Total	150		
Attitude toward School	Exp	78	8.65	7.97	7.97	Between	1	.03	.01
	Comp	74	8.65	8.00	8.00*	Within	149	3.23	NS
						Total	150		
Attitude toward Work	Exp	78	22.05	22.47	22.46*	Between	1	3.09	.43
	Comp	74	22.01	22.16	22.18	Within	149	7.22	NS
						Total	150		
Decision-Making Skill	Exp	78	10.33	10.68	10.60	Between	1	3.14	.84
	Comp	74	10.00	10.81	10.89*	Within	149	3.75	NS
						Total	150		
Job Requirements	Exp	78	37.45	38.77	38.77*	Between	1	.54	.03
	Comp	74	37.45	38.65	38.65	Within	149	19.06	NS
						Total	150		
Nature of Jobs	Exp	78	16.76	16.82	16.86	Between	1	.13	.02
	Comp	74	16.99	16.96	16.92	Within	149	5.55	NS
						Total	150		
Work Behavior	Exp	78	4.14	4.10	4.09*	Between	1	.04	.02
	Comp	74	4.07	4.04	4.06	Within	149	1.87	NS
						Total	150		
Job-Seeking Skills	Exp	78	12.24	13.19	13.40	Between	1	.27	.05
	Comp	74	13.20	13.70	13.48*	Within	149	5.87	NS
						Total	150		

APPENDIX A

Staff Contact Log

Corporation

Nature of Contact Key

A. Planning (e.g., organize workshop, arrange [illegible])
B. Orientation (introduction of CE to a large group)
C. Workshop (instruction for school personnel)
D. Consultation (instructional assistance for an indiv. or small group planning or carrying out CE)
E. Service (e.g., deliver materials or mobile unit)
F. Observation (e.g., of classroom activities)
G. Coordination of Student Activity (e.g., career day)
H. Community Contact (e.g., PTA, adv. comm., civic org.)

Date	Duration (hrs.; min.)	Staff Present									Nature (see Key) List all that apply.	Participants. List all names and titles. Continue on back if necessary. Examples: Mary Jones, Eng. Mark Smith, 6th Lisa Clark, Principal Jake Blake, Counselor Entire faculty PTA	Topic(s) of discussion or specific purpose of visit.	Comments
		Gina	Alex	Judy	Ed	Joe	Gilda	Art	Mike	Other (specify)				

CRP Form 4, revised 3/76

APPENDIX B

Careers Orientation Battery--Specimen Set

NED NEW EDUCATIONAL DIRECTIONS, INC.
a nonprofit service organization
BOX 307 CRAWFORDSVILLE, INDIANA 47933 (317) 362-8877

Description of the
Careers Orientation Battery (COB)

Form 24
Grades 2 to 4

Part	Items	Scale Name	Career Education Objective
I	24	Technology	The student will understand the interrelatedness of various jobs.
IIa*	21	Self Esteem	The student will develop a positive attitude toward him/herself.
IIb	19	Attitudes toward School	School activities will be perceived as satisfying and relevant to a student's personal needs.
III	17	Attitudes toward Work	The student will develop desirable work attitudes.
IV	31	World of Work	Students will be aware of the requirements for and nature of various jobs.
		Form 58 Grades 5 to 8	
I	24	Technology	Students will understand the influence of technology on American society.
IIa*	21	Self Esteem	The student will develop a positive attitude toward him/herself.
IIb	19	Attitude toward School	School activities will be perceived as satisfying and relevant to a student's personal needs.
III	30	Attitudes toward Work	Students will develop desirable work attitudes.
IV	16	Decision-Making Skills	Students will develop career decision-making skills.
V	35	World of Work	Students will be aware of the requirements for and nature of various jobs.

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*Part II includes items from both the self esteem and attitudes toward school scales.

Form 912
Grades 9 to 12

Part	Items	Scale Name	Career Education Objective
I	20	Technology	Students will understand the relationships among technology, sociological change, and the world of work.
IIa*	12	Self Esteem	The student will develop a positive attitude toward him/herself.
IIb	12	Attitude toward School	School activities will be perceived as satisfying and relevant to a student's personal needs.
III	30	Attitudes toward Work	Students will develop desirable work attitudes.
IV	16	Decision-Making Skills	Students will develop career decision-making skills.
V	62	Job Requirements	Students will be aware of the abilities, interests, values, personality traits, and education required for various occupations.
VI	26	Nature of Jobs	Students will be aware of the reasons for various methods and amounts of payment and of the relative income and working conditions of workers in various jobs.
VII	6	Work Behavior	Students will recognize appropriate and inappropriate behavior in work situations.
VIII	21	Job Seeking Skills	Students will develop job-seeking skills.

---

*Part II includes items from both the self esteem and attitudes toward school scales.

CAREERS ORIENTATION BATTERY (COB)

- experimental edition -

Form 24

Name: ______________________________ Boy Girl

Grade: ____________ Teacher's Name: ______________________________

PART I

Directions: Your teacher will read the following questions aloud while you read them to yourself. This morning Mary woke up, brushed her teeth, washed her face, got dressed, made her bed, ate breakfast, and rode the bus to school. Put a check mark (✓) next to ALL of the workers who helped make these things possible.

_____1. Bus driver
_____2. Grocery store clerk
_____3. Assembly line worker
_____4. Truck driver
_____5. Chemist
_____6. Garage mechanic
_____7. Plumber
_____8. Sign maker
_____9. Seamstress
_____10. Insurance agent

Imagine that you have a wooden pencil. Put a check mark (✓) next to ALL of the workers who were necessary to make the pencil.

____11. Forester
____12. Carpenter
____13. Miner
____14. Lumber jack
____15. Designer
____16. Saw mill hand
____17. Farmer

Put a check mark (✓) next to ALL of the workers who help your school run.

____18. Politician
____19. Tax collector
____20. Mailman
____21. Writer
____22. Salesman
____23. College professor
____24. Principal

Form 24

PART II

Directions: Your teacher will read each of the following questions aloud while you read them to yourself. For each question, please draw a circle around the answer that is BEST FOR YOU.

SAMPLE: Do you like to receive expensive gifts?
[✓ Yes] No

If you like to receive expensive gifts, you would circle YES. This is NOT a test, but please try to be as honest as you can. If you have any questions, please raise your hand and the teacher will help you.

1. Do you forget most of what you learn?
Yes No

2. Do you feel left out at school?
Yes No

3. Do your classmates usually pay attention to what you say?
Yes No

4. Would you rather look like someone else?
Yes No

5. Do you use what you learn at school when you are at home?
Yes No

6. Is recess the best part of school?
Yes No

7. Do you think most of the things you learn in school are really important?
Yes No

8. Would you rather be someone else?
Yes No

9. If you don't understand something your teacher says, do you usually ask her to explain it?
Yes No

10. Do you often wish you didn't have to grow up?
Yes No

11. Do you get upset if you are not chosen to be a group leader?
Yes No

12. Do you like to be alone sometimes?
Yes No

Form 24 Part II cont.

13. Do you feel bad when people laugh at your mistakes?
Yes No

14. Are there some things you do better than most of your friends?
Yes No

15. Do you like to miss school?
Yes No

16. Do grownups often talk with you?
Yes No

17. Do you generally like the way you look?
Yes No

18. Is it important to speak well?
Yes No

19. Do you wish you didn't have to go to school?
Yes No

20. Do you often read at home when you don't have to?
Yes No

21. Do most children have more friends than you?
Yes No

22. Do you expect to be a success in life?
Yes No

23. Do you usually feel unhappy at school?
Yes No

24. Do you express your anger?
Yes No

25. Do you like to do things that are hard for you?
Yes No

26. Do most of your classmates like you?
Yes No

27. Do you think learning about history is a waste of time?
Yes No

28. Does it bother you to answer questions in class?
Yes No

29. Do you hate to do your homework?
Yes No

30. Will you have to use math when you are out of school?
Yes No

Form 24 Part II cont.

31. Do you ever cry?
Yes No

32. Do you believe that if at first you don't succeed, you should try something else?
Yes No

33. Do you often daydream in class?
Yes No

34. Do you think most people respect you?
Yes No

35. Do you like to skip school?
Yes No

36. Do you raise your hand in class very often?
Yes No

37. Does school make you feel inferior?
Yes No

38. Do you look forward to your future?
Yes No

39. Do you usually like school?
Yes No

40. Do grownups often listen to your ideas?
Yes No

PART III

Do you agree or disagree with the following statements?

1. You may change jobs many times during your lifetime.
Agree Disagree

2. A person who has worked for a company for more than 5 years should never be fired.
Agree Disagree

3. A student is a worker.
Agree Disagree

4. A wife is always successful if her husband has a good job.
Agree Disagree

Form 24 Part III cont.

5. I look forward to having a regular job when I grow up.
Agree Disagree

6. A boss should compliment workers who come to work on time every day and obey all the company rules.
Agree Disagree

7. A boss should compliment workers who do extra good work.
Agree Disagree

8. Only boys need to plan for a career.
Agree Disagree

9. People should expect to enjoy their jobs.
Agree Disagree

10. If you try hard enough, you can have ANY kind of job you want.
Agree Disagree

11. The only reason to work is to get paid.
Agree Disagree

12. A housewife is a worker.
Agree Disagree

13. A boss should fire workers who don't do a good job.
Agree Disagree

14. Everyone should want to do some kind of work.
Agree Disagree

15. Both men and women can have interesting jobs.
Agree Disagree

16. Different jobs make different people happy.
Agree Disagree

17. A person's income tells you how successful he or she is.
Agree Disagree

Form 24

PART IV

Directions: Your teacher will read each of the following questions aloud while you read them to yourself. For each question, please draw a circle around the answer you think is the best answer.

SAMPLE: Where does a broadcaster work?
a. A supermarket
[✓ b.] A radio station
c. A garage

A broadcaster works in a radio station, so (b) is circled. This is NOT a test, but please try to do as well as you can.

1. Who does NOT usually wear a uniform?
a. A waitress
b. A stewardess
c. A secretary

2. Who works in an office?
a. A file clerk
b. A dispatcher clerk
c. A check-out clerk

3. Do all engineers drive trains?
a. Yes
b. No

4. Who works at night MOST often?
a. A physical therapist
b. A public health nurse
c. An orderly

5. Who does NOT have to know about insects?
a. A forest ranger
b. A garbage collector
c. An exterminator

6. Who helps you look nice?
a. A model
b. A dry cleaner
c. A cleaning lady

7. Who works with adults?
a. A teacher
b. A librarian
c. Both a and b

8. Can a boy become a nurse?
a. Yes
b. No

Form 24 Part IV cont.

9. Who spends the MOST time alone?
   a. A lathe operator
   b. A truck driver
   c. An accountant

10. Who has to have a pleasant voice?
   a. A news broadcaster
   b. A newspaper reporter
   c. A news analyst

11. Do most actresses make a lot of money?
   a. Yes
   b. No

12. Who works in a hotel?
   a. A bell hop
   b. A surveyor
   c. Both a and b

13. Who spends the MOST time outdoors?
   a. A horticulturist
   b. A botanist
   c. A nurseryman

14. Who has to go to school the longest?
   a. An architect
   b. An interior designer
   c. A commercial artist

15. Can a girl become a doctor?
   a. Yes
   b. No

16. If you like to draw, what would be a good job for you?
   a. A photographer
   b. A fashion designer
   c. A potter

17. Who is MOST likely to work in a factory?
   a. A keypunch operator
   b. An optician
   c. A welder

18. Who helps sick people the MOST?
   a. An X-ray technician
   b. A health inspector
   c. A drugstore clerk

19. Does an assembly line worker work in a factory?
   a. Yes
   b. No

Form 24 Part IV cont

20. Who helps build houses?
    a. An insurance agent
    b. An electrician
    c. A real estate agent

21. Who spends the MOST time talking to people?
    a. A bus driver
    b. A car salesman
    c. A gas station attendant

22. Who has to go to college?
    a. An astronaut
    b. A race car driver
    c. An auto mechanic

23. Who uses math in their jobs?
    a. Scientists and bank tellers
    b. Cooks and painters
    c. Both a and b

24. Who usually makes the most money?
    a. A plumber
    b. A teacher
    c. A fireman

25. Who writes alot of reports in their work?
    a. A policeman
    b. A bookkeeper
    c. A mail carrier

26. Who is probably away from home the most?
    a. A detective
    b. A marine
    c. An airline dispatcher

27. Which jobs SHOULD women do?
    a. A teacher or a stewardess
    b. A lawyer or an engineer
    c. Both a and b

28. Who has to be most friendly?
    a. A receptionist
    b. A secretary
    c. A telephone operator

29. Who has the MOST dangerous job?
    a. A security guard
    b. An airline pilot
    c. A coal miner

Form 24 Part IV cont

30. If your hobby is rock collecting, what might be the best job for you?
   a. A biologist
   b. A geologist
   c. A meteorologist

31. Which jobs SHOULD men do?
   a. A hairdresser or secretary
   b. A mechanic or pilot
   c. Both a and b

The CAREERS ORIENTATION BATTERY was prepared by New Educational Directions, Inc., Crawfordsville, Indiana under contract with the Careers Resource Project, Huntingburg, Indiana (Project No. V 361132, Grant No. OEG-0-73-5312 - Part D of Public Law 90-576.)

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CAREERS ORIENTATION BATTERY (COB)

Form 58

- experimental edition -

Directions: Please read each of the following questions carefully. On the separate answer sheet, draw a circle around the letter of the answer you think is the best answer. Do NOT mark on this booklet.

SAMPLE: Which is the largest automobile manufacturer in the United States?
- a. Ford Motor Company
- b. American Motors
- c. General Motors Corporation
- d. Chrysler Corporation

General Motors is the largest automobile manufacturer so "C" has been circled on your separate answer sheet. This is NOT a test but please do as well as you can. Answer all questions as honestly as possible.

PART I

Technology is new applications of knowledge, which usually makes workers depend upon each other.

1. Which ONE of the following would be an example of new technology?
   - a. The discovery of more oil.
   - b. Increased production of cars.
   - c. The invention of cars which do not use gasoline for fuel.
   - d. The exploration for oil in the sea.

2. It takes less time to build an automobile today than it did when the first automobiles were built. Which ONE of the following is the main reason for the increased speed in car production?
   - a. People work faster today than before.
   - b. Many cars are produced on assembly lines.
   - c. More people want cars today than before.

3. Technological change in the electronics industry has resulted in
   - a. More workers needing retraining.
   - b. Higher prices of electronics equipment.
   - c. Fewer jobs in the electronics industry.

The following statements name some changes that have occurred in the American Society since 1900. Which changes have been influenced by technology?

4. People go grocery shopping less often.
   - a. This change has been influenced by technology.
   - b. This change has NOT been influenced by technology.

Form 58 Part I cont.

5. Families have fewer children.
   a. This change has been influenced by technology.
   b. This change has NOT been influenced by technology.

6. Most people go to school longer.
   a. This change has been influenced by technology.
   b. This change has NOT been influenced by technology.

7. People have more leisure time.
   a. This change has been influenced by technology.
   b. This change has NOT been influenced by technology.

8. More women work outside the home.
   a. This change has been influenced by technology.
   b. This change has NOT been influenced by technology.

9. Some kinds of animals can no longer be found alive today.
   a. This change has been influenced by technology.
   b. This change has NOT been influenced by technology.

10. There are more large companies.
   a. This change has been influenced by technology.
   b. This change has NOT been influenced by technology.

Imagine that you have a wooden pencil. Which of the following workers were necessary to make the pencil?

11. Forester a. Yes b. No
12. Carpenter a. Yes b. No
13. Miner a. Yes b. No
14. Lumber jack a. Yes b. No
15. Designer a. Yes b. No
16. Saw mill hand a. Yes b. No
17. Farmer a. Yes b. No

Which of the following workers help your school run?

18. Politician a. Yes b. No
19. Tax collector a. Yes b. No
20. Mailman a. Yes b. No
21. Writer a. Yes b. No
22. Salesman a. Yes b. No
23. College professor a. Yes b. No
24. Principal a. Yes b. No

CONTINUE ON TO PART II

PART II

There are no correct or incorrect answers to questions in Part II. Please answer honestly.

1. Do you forget most of what you learn? a. Yes b. No
2. Do you feel left out at school? a. Yes b. No
3. Do your classmates usually pay attention to what you say? a. Yes b. No
4. Would you rather look like someone else? a. Yes b. No
5. Do you use what you learn at school when you are at home? a. Yes b. No
6. Is recess the best part of school? a. Yes b. No
7. Do you think most of the things you learn in school are really important? a. Yes b. No
8. Would you rather be someone else? a. Yes b. No
9. If you don't understand something your teacher says, do you usually ask her to explain it? a. Yes b. No
10. Do you often wish you didn't have to grow up? a. Yes b. No
11. Do you get upset if you are not chosen to be a group leader? a. Yes b. No
12. Do you like to be alone sometimes? a. Yes b. No
13. Do you feel bad when people laugh at your mistakes? a. Yes b. No
14. Are there some things you do better than most of your friends? a. Yes b. No
15. Do you like to miss school? a. Yes b. No
16. Do grownups often talk with you? a. Yes b. No
17. Do you generally like the way you look? a. Yes b. No
18. Is it important to you to learn to speak well? a. Yes b. No
19. Do you wish you didn't have to go to school? a. Yes b. No
20. Do you often read at home when you don't have to? a. Yes b. No
21. Do most children have more friends than you? a. Yes b. No
22. Do you expect to be a success in life? a. Yes b. No
23. Do you usually feel unhappy at school? a. Yes b. No
24. Do you express your anger? a. Yes b. No
25. Do you like to do things that are hard for you? a. Yes b. No
26. Do most of your classmates like you? a. Yes b. No
27. Do you think learning about history is a waste of time? a. Yes b. No
28. Does it bother you to answer questions in class? a. Yes b. No
29. Do you hate to do your homework? a. Yes b. No
30. Will you have to use math when you are out of school? a. Yes b. No

31. Do you ever cry? a. Yes b. No

32. Do you believe that if at first you don't succeed, you should try something else? a. Yes b. No

33. Do you often daydream in class? a. Yes b. No

34. Do you think most people respect you? a. Yes b. No

35. Do you like to skip school? a. Yes b. No

36. Do you raise your hand in class very often? a. Yes b. No

37. Does school make you feel inferior? a. Yes b. No

38. Do you look forward to your future? a. Yes b. No

39. Do you usually like school? a. Yes b. No

40. Do grownups often listen to your ideas? a. Yes b. No

CONTINUE ON TO PART III

PART III

Do you agree or disagree with the following statements?

1. A person should be prepared to change occupations several times during his or or her lifetime.
   a. Agree
   b. Disagree

2. A person's job isn't all that important because most of the really meaningful things in life are done off the job.
   a. Agree
   b. Disagree

3. A worker who's been with a company for a long time should never be fired, even if his performance decreases because the company owes him for years of service and should keep him on until retirement.
   a. Agree
   b. Disagree

4. A housewife is a worker.
   a. Agree
   b. Disagree

5. A student is a worker.
   a. Agree
   b. Disagree

6. A married woman's success depends on the kind of work her husband does.
   a. Agree
   b. Disagree

7. I look forward to having a regular job.
   a. Agree
   b. Disagree

Form 58 Part III cont.

8. Black employees should be paid more than others because this group has been discriminated against for so many years.
   a. Agree
   b. Disagree

9. It is the employer's responsibility to compliment an employee who comes to work on time every day and obeys all the company rules.
   a. Agree
   b. Disagree

10. It is the employer's responsibility to compliment an employee who does exceptionally good work.
    a. Agree
    b. Disagree

11. People should not expect to enjoy their jobs. As long as they're making a living doing something worthwhile, they should be satisfied.
    a. Agree
    b. Disagree

12. With enough ambition, anyone can do any kind or work he or she wants.
    a. Agree
    b. Disagree

13. Employees with children should be paid more than others because they need more money to support their families.
    a. Agree
    b. Disagree

14. There is no reason for people to work unless they get paid for it.
    a. Agree
    b. Disagree

15. It is the supervisor's responsibility to the company to fire employees who don't do good work.
    a. Agree
    b. Disagree

16. If an employee does his or her job well, he or she definitely should be promoted to a higher level position.
    a. Agree
    b. Disagree

17. A person's income tells you how successful he or she is.
    a. Agree
    b. Disagree

18. It is society's responsibility to provide everyone who wants to make some money with a job they know how to do.
    a. Agree
    b. Disagree

19. Whether they get paid for it or not, people should do some kind of constructive work because it is their duty as a member of the society.
    a. Agree
    b. Disagree

20. Whether they get paid for it or not, people should do some kind of constructive work because it makes them feel worthwhile.
    a. Agree
    b. Disagree

Does this USUALLY happen when a person does QUALITY WORK? The worker . . . .

21. gets less work done in a day.
    a. Yes
    b. No

22. is disliked by fellow workers.
    a. Yes
    b. No

23. works efficiently.
    a. Yes
    b. No

24. has a better chance for a raise.
    a. Yes
    b. No

25. gets longer paid vacations.
    a. Yes
    b. No

26. is more satisfied with his or her job.
    a. Yes
    b. No

27. puts less effort into his or her work.
    a. Yes
    b. No

28. takes shorter lunch breaks.
    a. Yes
    b. No

29. talks to other workers only about business matters.
    a. Yes
    b. No

30. gains self respect.
    a. Yes
    b. No

CONTINUE ON TO PART IV

Form 58

PART IV

For each of the following pairs, choose the item you think is more important to consider in choosing a future occupation.

1. a. Your sex
   b. Your grades

2. a. Whether your parents can afford to pay for a college education.
   b. Whether you work well in groups.

3. a. The kind of people you like to work with.
   b. Whether you want to be famous for your accomplishments.

4. a. Whether you could find certain kinds of jobs near your hometown.
   b. Whether you would rather work for a big organization, a small one, or for yourself.

5. a. How much money you want to make.
   b. How much you would enjoy doing different jobs.

6. a. What your parents would like you to do.
   b. How you feel about going to college or other training school after high school.

7. a. What your friends plan to do after high school.
   b. How much money you want to make.

8. a. Your skills - how well you do certain things.
   b. Your aptitudes - how quickly you learn certain kinds of things.

9. a. The feeling of accomplishment doing different kinds of jobs would give you.
   b. The amount of responsibility you would have in various jobs.

10. a. The wages you would make when you were hired.
    b. The chances for getting promoted to a higher level position.

11. a. The social position of workers in various jobs.
    b. The amount of leisure time you want to have.

12. a. Whether you want to get married eventually.
    b. Whether you would rather work indoors or outdoors.

13. During the past week, have you thought about what you want to be doing 10 years from now?
    a. Yes
    b. No

14. Choosing an occupation is similar to choosing a marriage partner in that . . . .
    a. Both decisions are pretty much made for you by circumstances and other people.
    b. Both decisions influence your life style.
    c. Both decisions should be final.

Form 58 Part IV cont.

15. When should you make a FINAL decision about what your occupation will be when you are 40?
    a. When you begin high school.
    b. When you graduate from high school.
    c. When you are in your twenties.
    d. When you are 40.

16. Is it important for a person your age to think about the kind of job he or she may want after finishing school?
    a. Yes
    b. No

CONTINUE ON TO PART V

PART V

1. Which of the following has to know the MOST about maps?
    a. Sailor
    b. Truck driver
    c. Topographer
    d. Pilot
    e. Photointerpreter

2. Which of these is the LEAST help to sick people?
    a. Pharmacist
    b. Ecologist
    c. Orderly
    d. Dietician
    e. Psychiatrist

3. What jobs SHOULD women do?
    a. Teacher, nurse, or stewardess
    b. Trucker, mechanic, or carpenter
    c. Doctor, lawyer, or scientist
    d. Any of the above

4. Who is usually college-trained?
    a. Fireman
    b. Computer programmer
    c. Salesman
    d. Disc jockey
    e. Computer operator

5. Who would probably NOT hire a nurse?
    a. Navy recruiter
    b. Pediatrician
    c. Large factory
    d. School board
    e. Psychologist

6. Who travels the LEAST?
    a. Commercial pilot
    b. Airline stewardess
    c. Air traffic controller
    d. Airline navigator

7. Who is a salesperson?
   a. Booking agent
   b. Insurance agent
   c. Travel agent
   d. None of the above
   e. a, b, and c

8. Do most actresses make a lot of money?
   a. Yes
   b. No

9. Which of these has LEAST to do with constructing houses?
   a. Glazier
   b. Mason
   c. Interior decorator
   d. Electrician
   e. a and c

10. Which jobs SHOULD men do?
    a. Life guard, usher, teacher
    b. Interior decorator, nurse, secretary
    c. Mechanic, engineer, pilot
    d. a and c
    e. Any of the above

11. Which job usually pays the MOST?
    a. Vice-president of a large corporation
    b. Vice-president of the United States
    c. Vice-president of a state university
    d. Supreme Court Justice

12. Who RARELY works at night?
    a. Policeman
    b. Comedian
    c. Telephone operator
    d. Electrician
    e. All of the above often work nights.

13. Who would take the MOST math courses?
    a. Mechanical engineer
    b. Computer programmer
    c. Accountant
    d. Statistician
    e. Industrial engineer

14. Who usually has to go to school the LONGEST?
    a. Legal secretary
    b. Attorney
    c. School teacher
    d. Navy officer

15. What do foresters study?
    a. Computer simulation
    b. Zoology
    c. Botany
    d. b and c
    e. a, b, and c

16. Whose job is probably the LEAST dangerous?
    a. Policeman
    b. Construction worker
    c. Security guard
    d. Coal miner

17. If you like to draw more than anything else, which would be the WORST job for you?
    a. Draftsman
    b. Interior decorator
    c. Optometrist
    d. Architect
    e. Set designer

18. Which job COULD a high school student do while going to school?
    a. Theater usher
    b. Sales clerk
    c. Paper deliverer
    d. Library assistant
    e. All of the above

19. Who spends a lot of time alone?
    a. Truck driver
    b. Lathe operator
    c. Accountant
    d. Fork lift operator
    e. Airline pilot

20. Who would be LEAST likely to live in a small town?
    a. Used car salesman
    b. Electrician
    c. Airline pilot
    d. Newspaper reporter

21. Who HAS to be able to communicate well?
    a. Sales clerk
    b. Barber
    c. Policeman
    d. Clergyman
    e. All of the above

22. Who is LEAST likely to study a foreign language?
    a. Flight attendant
    b. Doctor
    c. Lawyer
    d. C.I.A. agent
    e. Ambassador

23. People who graduate from college can always find a job.
    a. True
    b. False

How much education is usually needed to get these jobs?

24. Telephone solicitor
    a. High school diploma or less
    b. Up to three years of school after high school
    c. A four-year college degree
    d. More than four years of college

25. Salesperson in a department store
    a. High school diploma or less
    b. Up to three years of school after high school
    c. A four-year college degree
    d. More than four years of college

26. Administrative assistant
    a. High school diploma or less
    b. Up to three years of school after high school
    c. A four-year college degree
    d. More than four years of college

27. File clerk
    a. High school diploma or less
    b. Up to three years of school after high school
    c. A four-year college degree
    d. More than four years of college

28. Lawyer
    a. High school diploma or less
    b. Up to three years of school after high school
    c. A four-year college degree
    d. More than four years of college

29. Teacher
    a. High school diploma or less
    b. Up to three years of school after high school
    c. A four-year college degree
    d. More than four years of college

30. Plumber
    a. High school diploma or less
    b. Up to three years of school after high school
    c. A four-year college degree
    d. More than four years of college

31. Industrial engineer
    a. High school diploma or less
    b. Up to three years of school after high school
    c. A four-year college degree
    d. More than four years of college

32. Nurse
    a. High school diploma or less
    b. Up to three years of school after high school
    c. A four-year college degree
    d. More than four years of college

Form 58 Part V cont.

33. Hotel manager
    a. High school diploma or less
    b. Up to three years of school after high school
    c. A four-year college degree
    d. More than four years of college

34. Forester
    a. High school diploma or less
    b. Up to three years of school after high school
    c. A four-year college degree
    d. More than four years of college

35. Optometrist
    a. High school diploma or less
    b. Up to three years of school after high school
    c. A four-year college degree
    d. More than four years of college

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CAREERS ORIENTATION BATTERY (COB)

Form 912

- experimental edition -

Directions: Please read each of the following questions carefully. On the separate answer sheet, draw a circle around the letter of the answer you think is the best answer. Do NOT mark on this booklet.

SAMPLE: Which is the largest automobile manufacturer in the United States?
   a. Ford Motor Company
   b. American Motors
   c. General Motors Corporation
   d. Chrysler Corporation

General Motors is the largest automobile manufacturer so "C" has been circled on your separate answer sheet. This is NOT a test but please do as well as you can. Answer all questions as honestly as possible.

PART I

Technology is new application of knowledge resulting in increased interdependency of members of society.

1. Which ONE of the following would be an example of new technology?
   a. The discovery of more oil.
   b. Increased production of cars.
   c. The invention of cars which do not use gasoline for fuel.
   d. The exploration for oil in the sea.

2. It takes less time to build an automobile today than it did when the first automobiles were built. Which ONE of the following is the main reason for the increased speed in car production?
   a. People work faster today than before.
   b. Many cars are produced on assembly lines.
   c. More people want cars today than before.
   d. Cars have fewer parts to put together now.

3. Technological change in the electronics industry has resulted in
   a. An increased number of workers needing retraining.
   b. An increase in the price of electronics equipment.
   c. A decreased number of jobs in the electronics industry.

The following statements name some changes that have occurred in the American Society since 1900. Which changes have been influenced by technology?

4. People go grocery shopping less often.
   a. This change has been influenced by technology.
   b. This change has NOT been influenced by technology.

5. Families have fewer children.
    a. This change has been influenced by technology.
    b. This change has NOT been influenced by technology.

6. Most people go to school longer.
    a. This change has been influenced by technology.
    b. This change has NOT been influenced by technology.

7. People have more leisure time.
    a. This change has been influenced by technology.
    b. This change has NOT been influenced by technology.

8. More women work outside the home.
    a. This change has been influenced by technology.
    b. This change has NOT been influenced by technology.

9. Some species of animals are becoming extinct.
    a. This change has been influenced by technology.
    b. This change has NOT been influenced by technology.

10. There are more large companies.
    a. This change has been influenced by technology.
    b. This change has NOT been influenced by technology.

11. A person has more careers to choose from.
    a. This change has been influenced by technology.
    b. This change has NOT been influenced by technology.

12. Workers have become more specialized.
    a. This change has been influenced by technology.
    b. This change has NOT been influenced by technology.

13. People move more often.
    a. This change has been influenced by technology.
    b. This change has NOT been influenced by technology.

Several segments of the labor market are listed below. For some, it will probably be easier to find jobs in 1980 than it was in 1970. For others, it may be more difficult.

14. Women
    a. Easier
    b. More difficult

15. White males
    a. Easier
    b. More difficult

16. Minority races
    a. Easier
    b. More difficult

17. Handicapped
    a. Easier
    b. More difficult

Form 912 Part I cont.

18. College graduates
    a. Easier
    b. More difficult

19. Vocational or technical school graduates
    a. Easier
    b. More difficult

20. High school graduates
    a. Easier
    b. More difficult

PART II

There are no correct or incorrect answers to questions in Part II. Please answer honestly.

1. Do other people pay attention to what you say?
   a. Yes
   b. No

2. Do you learn things in school that will help you get a job?
   a. Yes
   b. No

3. Does it bother you if a classmate knows more than you do?
   a. Yes
   b. No

4. Are the things you learn at school really necessary for being successful later in life?
   a. Yes
   b. No

5. Do you get embarrassed when you make a mistake?
   a. Yes
   b. No

6. If you don't understand something a teacher says in class do you ask him or her to explain it?
   a. Yes
   b. No

7. Would you have alot fewer problems if you were better looking?
   a. Yes
   b. No

8. Do you wish you could drop out of school?
   a. Yes
   b. No

9. Do you think most people respect you?
   a. Yes
   b. No

10. Does school make you feel inferior?
    - a. Yes
    - b. No

11. Do you enjoy being alone?
    - a. Yes
    - b. No

12. Do you hate doing homework?
    - a. Yes
    - b. No

13. Do you look forward to your future?
    - a. Yes
    - b. No

14. Do you like skipping classes?
    - a. Yes
    - b. No

15. Do you feel that you have control over your future?
    - a. Yes
    - b. No

16. Do your courses have much to do with what you want to do after graduation?
    - a. Yes
    - b. No

17. Do you think you have a pretty good chance of having a satisfying career?
    - a. Yes
    - b. No

18. Are most of your courses pretty interesting?
    - a. Yes
    - b. No

19. Do you wish you didn't have to grow older?
    - a. Yes
    - b. No

20. Do you often find yourself falling asleep in class?
    - a. Yes
    - b. No

21. Do you expect to be a sucess in life?
    - a. Yes
    - b. No

22. Are a lot of the courses you have to take really irrelevant?
    - a. Yes
    - b. No

23. Do you expect to do anything to benefit society?
    - a. Yes
    - b. No

24. Do you think the main purpose of high school is to prepare students for college?
    a. Yes
    b. No

PART III

There are no correct or incorrect answers to questions in Part III. Please answer honestly. How do you feel about the following statements?

1. A person should be prepared to change occupations several times during his or her lifetime.
    a. Agree
    b. Disagree

2. A person's job isn't all that important because most of the really meaningful things in life are done off the job.
    a. Agree
    b. Disagree

3. A worker who's been with a company for a long time should never be fired, even if his performance decreases because the company owes him for years of service and should keep him on until retirement.
    a. Agree
    b. Disagree

4. A housewife is a worker.
    a. Agree
    b. Disagree

5. A student is a worker.
    a. Agree
    b. Disagree

6. A married woman's success depends on the kind of work her husband does.
    a. Agree
    b. Disagree

7. I look forward to having a regular job.
    a. Agree
    b. Disagree

8. Black employees should be paid more than others because this group has been discriminated against for so many years.
    a. Agree
    b. Disagree

9. It is the employer's responsibility to compliment an employee who comes to work on time every day and obeys all the company rules.
    a. Agree
    b. Disagree

10. It is the employer's responsibility to compliment an employee who does exceptionally good work.
    a. Agree
    b. Disagree

11. People should not expect to enjoy their jobs. As long as they're making a living doing something worthwhile, they should be satisfied.
    a. Agree
    b. Disagree

12. With enough ambition, anyone can do any kind of work he or she wants.
    a. Agree
    b. Disagree

13. Men with children should be paid more than others because they need more money to support their families.
    a. Agree
    b. Disagree

14. There is no reason for people to work unless they get paid for it.
    a. Agree
    b. Disagree

15. It is the supervisor's responsibility to the company to fire employees who don't do good work.
    a. Agree
    b. Disagree

16. If an employee does his or her job well, he or she definitely should be promoted to a higher level position.
    a. Agree
    b. Disagree

17. A person's income tells you how successful he or she is.
    a. Agree
    b. Disagree

18. It is society's responsibility to provide everyone who wants to make some money with a job he or she knows how to do.
    a. Agree
    b. Disagree

19. Whether they get paid for it or not, people should do some kind of constructive work because it is their duty as a member of the society.
    a. Agree
    b. Disagree

20. Whether they get paid for it or not, people should do some kind of constructive work because it makes them feel worthwhile.
    a. Agree
    b. Disagree

Answer "a" for the items below which describe what USUALLY happens when a person does QUALITY WORK. Answer "b" for the others. The worker . . . .

21. gets less work done in a day.
    a. This is usually associated with doing quality work.
    b. This is not necessarily related to quality work.

22. is disliked by fellow workers.
    a. This is usually associated with doing quality work.
    b. This is not necessarily related to quality work.

23. works efficiently.
    a. This is usually associated with doing quality work.
    b. This is not necessarily related to quality work.

24. has a better chance for a raise.
    a. This is usually associated with doing quality work.
    b. This is not necessarily related to quality work.

25. gets longer paid vacations.
    a. This is usually associated with doing quality work.
    b. This is not necessarily related to quality work.

26. is more satisfied with his or her job.
    a. This is usually associated with doing quality work.
    b. This is not necessarily related to quality work.

27. puts less effort into his or her work.
    a. This is usually associated with doing quality work.
    b. This is not necessarily related to quality work.

28. takes shorter lunch breaks.
    a. This is usually associated with doing quality work.
    b. This is not necessarily related to quality work.

29. talks to other workers only about business matters.
    a. This is usually associated with doing quality work.
    b. This is not necessarily related to quality work.

30. gains self respect.
    a. This is usually associated with doing quality work.
    b. This is not necessarily related to quality work.

PART IV

There are no correct or incorrect answers to questions in Part IV. Please answer honestly. For each of the following pairs, choose the item you think is more important to consider in choosing a future occupation.

1. a. Your sex
   b. Your grades

2. a. Whether your parents can afford to pay for a college education.
   b. Whether you work well in groups.

3. a. The kind of people you like to work with.
   b. Whether you want to be famous for your accomplishments.

4. a. Whether you could find certain kinds of jobs near your hometown.
   b. Whether you would rather work for a big organization, a small one, or for yourself.

5. a. How much money you want to make.
   b. How much you would enjoy doing different jobs.

6. a. What your parents would like you to do.
   b. How you feel about going to college or other training school after high school.

7. a. What your friends plan to do after high school.
   b. How much money you want to make.

8. a. Your skills - how well you do certain things.
   b. Your aptitudes - how quickly you learn certain kinds of things.

9. a. The feeling of accomplishment doing different kinds of jobs would give you.
   b. The amount of responsibility you would have in various jobs.

10. a. The salary you would make when you were hired.
    b. The chances for getting promoted to a higher level position.

11. a. The social status of workers in various jobs.
    b. The amount of leisure time you want to have.

12. a. Whether you want to get married eventually.
    b. Whether you would rather work indoors or outdoors.

13. During the past week have you thought about what you want to be doing 10 years from now?
    a. Yes
    b. No

14. Choosing an occupation is similar to choosing a marriage partner in that . . . .
    a. both decisions are pretty much made for you by circumstances and other people.
    b. both decisions influence your life style.
    c. both decisions should be final.

15. Thinking about your future occupation while you are in high school is important because . . . .
    a. if you make the wrong decision now, you'll never have good opportunity to change your mind after you leave high school.
    b. it takes time to prepare for jobs and it's best to start while you're still in high school.
    c. both a and b.
    d. It's not important - high school students only need to decide which college to go to.

16. When should you make a FINAL decision about what your occupation will be when you are 40?
    a. When you begin high school.
    b. When you graduate from high school.
    c. When you are in your twenties.
    d. When you are 40.

FORM 912
PART V

Answer "a" to the jobs for which a person usually has to be aggressive to be successful. Answer "b" to the others.

1. Car salesperson
    a. Must be aggressive to be successful
    b. Does not necessarily have to be aggressive for success

2. Ticket agent
    a. Must be aggressive to be successful
    b. Does not necessarily have to be aggressive for success

3. Insurance agent
    a. Must be aggressive to be successful
    b. Does not necessarily have to be aggressive for success

4. Criminal lawyer
    a. Must be aggressive to be successful
    b. Does not necessarily have to be aggressive for success

5. Criminologist
    a. Must be aggressive to be successful
    b. Does not necessarily have to be aggressive for success

6. Lobbyist
    a. Must be aggressive to be successful
    b. Does not necessarily have to be aggressive for success

Answer "a" to the jobs which would be ESPECIALLY GOOD for people who like to HELP OTHER PEOPLE WITH PERSONAL OR FAMILY PROBLEMS. Answer "b" to the others.

7. Sociologist
    a. Especially good
    b. NOT especially good

8. Personnel psychologist
    a. Especially good
    b. NOT especially good

9. Clergyman
    a. Especially good
    b. NOT especially good

10. Employment counselor
    a. Especially good
    b. NOT especially good

11. Group therapist
    a. Especially good
    b. NOT especially good

12. Probation Officer
    a. Especially good
    b. NOT especially good

Answer "a" to the workers who must be DEPENDABLE. Answer "b" to the others.

13. Garbage collector
    a. Must be dependable
    b. Does not have to be dependable

14. Bank teller
    a. Must be dependable
    b. Does not have to be dependable

15. Ecologist
    a. Must be dependable
    b. Does not have to be dependable

Answer "a" to the jobs which would probably be good for people who WANT TO SPEND ALOT OF TIME AT HOME WITH THEIR FAMILIES. Answer "b" for the others.

16. Army officer
    a. Probably a good choice
    b. Probably not a good choice

17. College professor
    a. Probably a good choice
    b. Probably not a good choice

18. Policeperson
    a. Probably a good choice
    b. Probably not a good choice

19. Banker
    a. Probably a good choice
    b. Probably not a good choice

For each of the following pairs, indicate which job requires the best ORAL COMMUNICATION SKILLS.

20. a. Barber
    b. Proofreader

21. a. Marriage counselor
    b. Orthopedic surgeon

22. a. Librarian
    b. Salesperson

For each of the following pairs, indicate which worker would take the most MATHEMATICS COURSES in school.

23. a. TV repairman
    b. Bank teller

24. a. Accountant
    b. Mechanical engineer

25. a. Computer operator
    b. Forester

Form 912 Part V cont.

Answer "a" to the occupations which would be good to enter for a person who eventually WANTS TO BE SELF-EMPLOYED. Answer "b" to the others.

26. Truck driver
    - a. Could eventually be self-employed
    - b. Would probably never be self-employed

27. Beautician
    - a. Could eventually be self-employed
    - b. Would probably never be self-employed

28, Biologist
    - a. Could eventually be self-employed
    - b. Would probably never be self-employed

29. Architect
    - a. Could eventually be self-employed
    - b. Would probably never be self-employed

30. Electrical engineer
    - a. Could eventually be self-employed
    - b. Would probably never be self-employed

31. Electrician
    - a. Could eventually be self-employed
    - b. Would probably never be self-employed

An entrance-level job is one a person can get as soon as he or she finishes the required formal training. Answer "a" to these jobs. For other jobs, a person must first get related experience. For example, a school principal must usually work several years as a classroom teacher before becoming a principal. Answer "b" to these jobs.

32. Keypunch operator
    - a. Entrance-level job
    - b. Not an entrance-level job

33. Nuclear powerplant operator
    - a. Entrance-level job
    - b. Not an entrance-level job

34. Nuclear engineer
    - a. Entrance-level job
    - b. Not an entrance-level job

35. Sales manager
    - a. Entrance-level job
    - b. Not an entrance-level job

36. X-ray technician
    - a. Entrance-level job
    - b. Not an entrance-level job

37. Politician
    - a. Entrance-level job
    - b. Not an entrance-level job

38. Police detective
    a. Entrance-level job
    b. Not an entrance-level job

39. Commercial airline pilot
    a. Entrance-level job
    b. Not an entrance-level job

40. Programs at two-year community colleges are primarily for students who want to transfer to four-year colleges.
    a. True
    b. False

41. People who graduate from college can always find a job.
    a. True
    b. False

42. What is the most effective way for a worker to move from the occupational level of technician to that of a professional?
    a. Become actively involved in union activities.
    b. Contact an employment agency for assistance.
    c. Enroll in night courses to further his education.
    d. Work very hard at his technical job so he can get promoted to a professional job.

Indicate the MINIMUM amount of formal training that is USUALLY required before getting hired in each of the following occupations. Almost all jobs involve on-the-job training, but do not include that in your answer.

43. Telephone solicitor
    a. High school diploma or less
    b. Up to three years of business, vocational, or technical school after high school
    c. A four-year college degree
    d. More than four years of college

44. Head librarian of a college library
    a. High school diploma or less
    b. Up to three years of business, vocational, or technical school after high school
    c. A four-year college degree
    d. More than four years of college.

45. Salesperson in a department store
    a. High school diploma or less
    b. Up to three years of business, vocational, or technical school after high school
    c. A four-year college degree
    d. More than four years of college

46. Economist
    a. High school diploma or less
    b. Up to three years of business, vocational, or technical school after high school
    c. A four-year college degree
    d. More than four years of college.

47. Administrative assistant
    a. High school diploma or less
    b. Up to three years of business, vocational, or technical school after high school
    c. A four-year college degree
    d. More than four years of college

48. Legal secretary
    a. High school diploma or less
    b. Up to three years of business, vocational, or technical school after high school
    c. A four-year college degree
    d. More than four years of college

49. File clerk
    a. High school diploma or less
    b. Up to three years of business, vocational, or technical school after high school
    c. A four-year college degree
    d. More than four years of college

50. Meteorologist
    a. High school diploma or less
    b. Up to three years of business, vocational, or technical school after high school
    c. A four-year college degree
    d. More than four years of college

51. Actuary
    a. High school diploma or less
    b. Up to three years of business, vocational, or technical school after high school
    c. A four-year college degree
    d. More than four years of college

52. Dental hygienist
    a. High school diploma or less
    b. Up to three years of business, vocational, or technical school after high school
    c. A four-year college degree
    d. More than four years of college

53. Optometrist
    a. High school diploma or less
    b. Up to three years of business, vocational, or technical school after high school
    c. A four-year college degree
    d. More than four years of college

54. Grocery check-out clerk
    a. High school diploma or less
    b. Up to three years of business, vocational, or technical school after high school
    c. A four-year college degree
    d. More than four years of college

55. School psychologist
    a. High school diploma or less
    b. Up to three years of business, vocational, or technical school after high school
    c. A four-year college degree
    d. More than four years of college

56. Industrial engineer
    a. High school diploma or less
    b. Up to three years of business, vocational, or technical school after high school
    c. A four-year college degree
    d. More than four years of college

57. Nurse
    a. High school diploma or less
    b. Up to three years of business, vocational, or technical school after high school
    c. A four-year college degree
    d. More than four years of college

58. Forester
    a. High school diploma or less
    b. Up to three years of business, vocational, or technical school after high school
    c. A four-year college degree
    d. More than four years of college

59. Waitress or waiter
    a. High school diploma or less
    b. Up to three years of business, vocational, or technical school after high school
    c. A four-year college degree
    d. More than four years of college

60. Hotel manager
    a. High school diploma or less
    b. Up to three years of business, vocational, or technical school after high school
    c. A four-year college degree
    d. More than four years of college

61. Cab driver
    a. High school diploma or less
    b. Up to three years of business, vocational, or technical school after high school
    c. A four-year college degree
    d. More than four years of college

62. Teacher
    a. High school diploma or less
    b. Up to three years of business, vocational, or technical school after high school
    c. A four-year college degree
    d. More than four years of college

PART VI

1. It is illegal for any employer to pay his employees less than the minimum wage set by the federal government.
    a. True
    b. False

2. Which one of the following is the BEST reason that some companies pay workers on the basis of how much they produce (a piece-rate)?
    a. The company does not have to pay overtime wages.
    b. Piece-rate pay is not taxable.
    c. Employees work more efficiently.
    d. The company does not have to provide fringe benefits.

John and Mary are both salespersons in shoestores. John makes more money than Mary. For each item, answer "a" if this is a good reason for John's higher income. Answer "b" if the reason is illegal or unlikely.

3. John has been selling shoes for several years and Mary just started a few months ago.
    a. This is a good reason for John's higher salary.
    b. This is probably not the reason, or it is an illegal reason.

4. John is a man with a family to support and Mary works mainly because she enjoys it.
    a. This is a good reason for John's higher salary.
    b. This is probably not the reason, or it is an illegal reason.

5. John's store is in a big city and Mary's is in a small town.
    a. This is a good reason for John's higher salary.
    b. This is probably not the reason, or it is an illegal reason.

6. John's store is larger than Mary's.
    a. This is a good reason for John's higher salary.
    b. This is probably not the reason, or it is an illegal reason.

7. John sells more shoes than Mary.
    a. This is a good reason for John's higher salary.
    b. This is probably not the reason, or it is an illegal reason.

8. John went to college and Mary did not.
    a. This is a good reason for John's higher salary.
    b. This is probably not the reason, or it is an illegal reason.

Form 912 Part VI cont.

For each pair, choose the job that USUALLY involves the largest VARIETY of activities.

9. a. Fashion model
   b. Secretary

10. a. Tool and die maker
    b. Welder

11. a. Pharmacist
    b. Registered nurse

12. a. Minister
    b. Teacher

For each pair choose the job that USUALLY PAYS BEST.

13. a. Operating Room Technician
    b. Dental hygienist

14. a. Long haul trucker
    b. Social worker

15. a. Brick mason
    b. Disc jockey

16. a. Veterinarian
    b. Pediatrician

For each pair choose the worker who USUALLY has the most JOB SECURITY.

17. a. Carpenter
    b. Auto mechanic

18. a. Insurance agent
    b. Real estate agent

19. a. County sheriff
    b. State trooper

20. a. College football coach
    b. College athletic director

For each pair, choose the worker who USUALLY has the greatest OPPORTUNITY FOR ADVANCEMENT.

21. a. Airline stewardess
    b. Clothing salesperson

22. a. Computer programmer
    b. Draftsman

23. a. Foreman
    b. Manager trainee

For each pair, choose the worker who WORKS UNDER PRESSURE MOST OFTEN.

24. a. Air traffic controller
    b. Fireman

25. a. Production manager
    b. Personnel manager

26. a. Security guard
    b. Assembly line worker

PART VII

1. Which of the following reasons is most frequently given for "firing" an employee?
   a. Lack of technical skills
   b. Irresponsibility
   c. Unacceptable appearance
   d. Membership in a labor union

2. Assume that Fred, a fellow employee, has made some mistakes of which he is unaware. You are sure that he will be embarrassed to know that you found mistakes in his work. On the other hand, if the mistakes go uncorrected, they will cause problems later on. Which ONE of the following would you do?
   a. Say nothing. - It's really none of your business.
   b. Tell the boss about the mistakes.
   c. Send Fred an anonymous letter about the mistakes he made.
   d. Tell Fred about the mistakes.

3. A fellow worker comes to you and tells you that he has been denied a promotion and a raise even though his work has seemed satisfactory. He asks you if you will speak to the boss for him. What would you do?
   a. Discuss the matter with the boss and get his side of the argument.
   b. Suggest to the worker that he file a discrimination complaint.
   c. Recommend that the employee talk to the boss again to find out exactly why he has not been promoted.
   d. Say nothing to the boss and avoid the employee in the future.

4. You have accidentally come across some records that make you think your boss is embezzling (stealing) company money. What would you do?
   a. Call the police immediately.
   b. Talk to your boss in private and ask him to explain the records. If you're still suspicious, talk to his boss.
   c. Talk to your boss's boss in private. Show him the records and let him handle the matter.
   d. Say nothing and find another job.

5. You accidentally find out your boss is cheating on his wife. You and he are not close friends. What would you do?
   a. Tell the boss's wife - it's her right to know.
   b. Have a heart-to-heart talk with your boss and suggest that he see a marriage counselor.
   c. Tell your boss's boss in private and let her handle the matter.
   d. Say nothing - it's really none of your business.

6. Your boss has just given you a task that MUST be completed by the end of the week. You know from experience that it is impossible to do this job properly in so short a time. What would you do?
   a. Point out that you need someone else to help if you're to complete the job by the end of the week and still do a good job.
   b. Work as fast as possible and get the job done. Even though the quality of the work may not be the best possible, at least you will have met the deadline.
   c. Concentrate on doing quality work and hope it gets done in time. If by Thursday night it's obvious that you can't make the deadline, tell your boss.
   d. Inform the head of the department that your boss expects too much of you.

PART VIII

1. All job openings in a town are advertised in the local newspaper.
   a. True
   b. False

2. Sue sees a want ad in the newspaper that says "1-5 years related experience." Although she fills all the other requirements stated in the ad, she's only spent one summer doing similar work. She should not apply for the job because this will only irritate the employer and spoil her chances for ever working for that company.
   a. True
   b. False

3. If you are looking for a full-time permanent job, there is no sense in applying for part-time or temporary positions unless you really need the money right away.
   a. True
   b. False

4. To get some jobs, you must first become a member of a labor union.
   a. True
   b. False

5. Unless you know a company has job openings, you should not submit an application or ask for an interview.
   a. True
   b. False

6. The State Employment Office provides FREE information about job openings and job training programs.
   a. True
   b. False

7. Private employment agencies usually charge a fee whether they find a job for you or not.
   a. True
   b. False

8. If a private employment agency places you in a job, you may have to pay them a full month's salary before you even start working.
   a. True
   b. False

9. If you get a job through a private employment agency and the employer pays the fee, you are obligated to stay on the job for a certain period of time. If you quit, you have to pay the fee yourself.
   a. True
   b. False

10. When going for a personal interview you should always wear the same kind of clothes you would wear on that job.
    a. True
    b. False

11. John plans to quit his job because it is so dull he dreads going to work in the morning. He is now interviewing for another job, which happens to pay a little bit better, and the interviewer has asked why he wants to quit his present job. He should say it's because he's not making enough money to support his family. Otherwise, the interviewer may think he's lazy.
    a. True
    b. False

12. Under "Job Experience:" on a job application you should list volunteer work you have done, as well as jobs you were paid for.
    a. True
    b. False

13. Once you've submitted a job application you should wait for the employer to contact you before writing, calling, or dropping by again.
    a. True
    b. False

14. Want ads in the newspaper are often deceiving, making the job sound more exciting or better-paying than it really is.
    a. True
    b. False

15. An employer is NOT allowed to turn down an applicant for a job on the basis of which ONE of the following?
    a. Whether the applicant has a certain amount of education.
    b. Whether the applicant has had related job experience.
    c. Whether the applicant is nicely dressed.
    d. Whether the applicant is male or female.

16. The nation has laws which provide for protection against job discrimination. Which ONE of the following groups benefits most from such protection?
    a. High school dropouts
    b. Older workers who would like to change their occupation
    c. Men who don't want to cut their long hair to get a job
    d. Labor unions who want higher wages for their members

During a job interview you should . . . .

17. be humble about your accomplishments and abilities.
    a. True
    b. False

18. avoid discussing your weaknesses.
    a. True
    b. False

19. keep your answers to questions as short and to the point as possible.
    a. True
    b. False

20. ask about the pay and fringe benefits.
    a. True
    b. False

21. make a point of how much you need a job.
    a. True
    b. False

APPENDIX C

COB Statistical Memoranda

Memorandum for: JOE ROTH

cc: Kim Powers
CRP Consultants

Subject: Results of Careers Orientation Battery (COB) Pretest Administration

Date: December 22, 1975

References: Project No. V361182
Grant No. OEG-0-73-5312

From: Deborah G. Bonnet

During the fall of 1975 the Careers Orientation Battery (COB) was administered to 62 classes in the CRP service area. Students in 54 classes completed all scales of the battery, the results of these 1,591 students are summarized here.

General Results It appears that all scales of all forms are usable. On many scales, average scores were near the guess rate, and average scores were below 80 percent in all cases. This indicates that further learning can be measured in the spring posttesting. Standard deviations are also quite low, especially on scales measuring the cognitive domain, thereby improving the chances of finding "significant" improvement. Correlations among scales are generally low, which is a desirable characteristic of a battery such as the COB in which various scales are intended to measure different attributes.

Attached to this memorandum are tables showing mean scores on each scale at each grade level. These scores are expressed as the number "correct" out of 100. Tables showing correlations among scales are also included. Group item tallies are given for grades 3, 6, 9, and 12.

Form 24

Although we would expect scores on most scales to increase with age, grade 3 scores are generally higher than those of grade 2 or grade 4 students. It is probable that the third-grade students tested represent a more knowledgeable group than average if it is assumed grade 2 and 4 students are average for the CRP service area.

Technology. Scores at grades 2 and 4 are at or below "guess rate," indicating very little knowledge in this area. The third-grade group seems to have attained these concepts to some degree, but the scale still allows room for growth.

Self Esteem. Self esteem scores appear to have little relationship to age at these levels. In grade 2, girls' self esteem is lower than boys; but the trend reverses in third and fourth grades. Self esteem is correlated rather highly with attitudes towards school. That is, a child who likes himself is likely to like school as well.

Attitudes Towards School. Scores decrease with age and are considerably higher for girls than for boys, which is consistent with the findings of a number of studies of children's attitudes towards school. This is a good indication that the scale indeed measures these attitudes, thereby offering confirmation to the scale's content validity.

Attitudes Towards Work. Scores increase with age and girls score slightly higher than boys. This scale correlates quite highly with world of work scale indicating that these attitudes are related to knowledge of or exposure to the working world.

World of Work. Scores seem to increase with age. Second and fourth-grade boys score slightly higher than girls in these grades.

Form 58

The seventh-grade group is small and apparently unrepresentative of the CRP population, as their scores are consistently higher than the larger eighth grade group.

Technology. Scores increase with age and boys score higher than girls.

Self Esteem. Age seems to have little relationship to the total mean self esteem at these grade levels. The self-esteem scale on form 58 is identical to that on form 24. In third and fourth grade, girls' self esteem is higher than boys', but from grade 5 to 8, girls' scores are lower. This result has also been found in previous research. Self esteem is correlated to attitudes towards school.

Attitudes Towards School. Scores show no notable pattern across age levels, but girls consistently score higher than boys.

Attitudes Towards Work. Scores tend to increase with age and girls score higher than boys.

Decision-Making. Scores tend to increase with age and girls score slightly higher than boys. This scale correlates with the world of work, indicating a relationship between awareness of the working world and career decision-making skills.

World of Work. Scores are very low at all levels, but tend to increase with age.

Form 912

Correlations among scales on form 912 are higher than those for form 58, but are still sufficiently low to indicate that different scales measure different things. Considerable growth can be seen from ninth to twelfth grade on all scales.

Technology. Scores increase with age; boys score higher than females. There was some concern that students would "catch on" to the pattern of items in this section, where the correct answer was in all cases "yes," but apparently few did.

Self Esteem. As may be expected, seniors' self esteem is generally higher than freshmen's, but the sex differences found in grades 5 to 8 are less notable with high school students. There is a positive relationship between self esteem and attitudes towards school at all levels.

Attitudes Towards Work. Scores increase with age and girls score higher. The There are relatively high correlations between this scale and technology, decision-making, and job requirements.

Decision-Making. Scores are generally quite low, but increase with age. Girls score higher than boys. Scores correlate with job requirement scores, indicating that career decision-making skills improve at the same time awareness of the work world increases.

Job Requirements and Nature of Jobs. As may be expected, job requirements scale correlates highly with the nature of jobs scale. On both scales the increase with age is quite large, although even twelfth graders score rather low.

Work Behavior. Somewhat to our surprise, students did not "top out" on this six-item scale. Scores correlate with job-seeking skills and decision-making skills.

Job-Seeking Skills. Scores do improve with age. However, the job-sddking skills of seniors, many of whom will soon be seeking full-time employment, are remarkably low.

COB FORM 24
Mean Scores and Standard Deviations*
by Grade Level and Sex

Scale	Grade 2			Grade 3			Grade 4		
	T	M	F	T	M	F	T	M	F
Number of students	30	15	15	314	163	151	122	62	60
I. Technology									
Mean									
Standard Deviation	49	51	48	60	58	61	44	47	42
	11	11	11	21	21	21	13	15	15
IIA. Self Esteem									
Mean	62	64	59	64	64	65	57	54	59
Standard Deviation	12	12	12	15	16	14	15	15	15
IIB. Attitudes Towards School									
Mean	74	68	79	72	67	77	65	56	74
Standard Deviation	15	18	9	20	21	17	21	22	16
III. Attitudes Towards Work									
Mean	60	60	61	63	62	65	66	64	68
Standard Deviation	10	9	12	13	13	13	11	12	10
IV. World of Work									
Mean	39	41	36	45	45	45	45	47	43
Standard Deviation	9	8	8	11	11	11	10	11	9

*Scores are expressed as the percent of keyed responses.

COB FORM 24
Correlations Among Scales*
Grade 3 N = 314

	I	IIA	IIB	III	IV
I. Technology	-				
IIA. Self Esteem	-.11	-			
IIB. Attitudes Towards School	.01	.54	-		
III. Attitudes Towards Work	-.08	.21	.20	-	
IV. World of Work	-.13	.16	.14	.44	-

*Pearsonian Coefficients of Correlation

COB FORM 58
Mean Scores and Standard Deviations* by Grade Level and Sex

Scale	Grade 5			Grade 6			Grade 7			Grade 8		
	T	M	F	T	M	F	T	M	F	T	M	F
Number of Students	101	50	51	432	229	203	55	35	20	110	56	54
I. Technology												
Mean	49	50	48	56	56	55	71	71	69	62	65	59
Stand. Dev.	12	11	12	11	11	11	11	12	9	13	13	12
IIA. Self Esteem												
Mean	58	59	57	69	71	67	72	73	71	66	69	63
Stand. Dev.	16	16	16	15	15	16	14	16	10	16	16	15
IIB. Attitudes Towards School												
Mean	67	64	69	75	73	77	72	71	74	66	65	66
Stand. Dev.	20	18	21	17	18	16	18	19	16	19	19	20
III. Attitudes Towards Work												
Mean	58	56	59	63	62	65	69	69	70	64	62	66
Stand. Dev.	13	11	15	12	12	11	10	10	10	11	11	11
IV. Decision-Making												
Mean	48	44	52	53	53	54	62	62	61	56	54	57
Stand. Dev.	15	17	15	14	14	13	12	12	11	14	15	13
V. World of Work												
Mean	27	27	27	31	29	32	41	42	41	37	35	38
S Stand. Dev.	10	10	10	11	11	11	9	10	7	14	13	15

*Scores are expressed as the percent of keyed responses.

COB FORM 58
Correlations Among Scales*
Grade 6 N = 432

	I	IIA	IIB	III	IV	V
I. Technology	-					
IIA. Self Esteem	.19	-				
IIB. Attitudes Towards School	.20	.49	-			
III. Attitudes Towards Work	.18	.35	.35	-		
IV. Decision-Making	.15	.20	.18	.43	-	
V. World of Work	.21	.24	.23	.45	.25	-

*Pearsonian Coefficients of Correlation

COB FORM 912
Mean Scores and Standard Deviations*
by Grade Level and Sex

Scale	Grade 9			Grade 12		
	T	M	F	T	M	F
Number of Students	188	85	103	239	110	129
I. Technology						
Mean	62	62	61	67	69	66
Stand. Dev.	15	15	15	14	13	14
IIA. Self Esteem						
Mean	66	66	67	70	72	69
Stand. Dev.	17	19	16	15	15	15
IIB. Attitudes toward School						
Mean	64	62	66	71	67	74
Stand. Dev.	20	21	19	21	21	19
III. Attitudes toward Work						
Mean	65	63	67	73	71	75
Stand. Dev.	13	12	13	10	11	9
IV. Decision-Making						
Mean	55	52	58	63	62	64
Stand. Dev.	14	13	14	12	12	12
V. Job Requirements						
Mean	52	50	53	59	58	60
Stand. Dev.	9	9	8	10	9	11
VI. Nature of Jobs						
Mean	54	53	55	63	64	62
Stand. Dev.	13	14	13	13	12	13
VII. Work Behavior						
Mean	48	43	51	67	64	69
Stand. Dev.	28	28	28	24	25	23
VIII. Job-Seeking						
Mean	48	45	51	59	57	62
Stand. Dev.	18	20	1[illegible]	17	17	16

*Scores are expressed as the percent of keyed responses.

COB FORM 912
Correlations Among Scales*
Grade 9 N = 188

	I	IIA	IIB	III	IV	V	VI	VII	VIII
I. Technology	-								
IIA. Self Esteem	.24	-							
IIB. Attitudes Towards School	.18	.44	-						
III. Attitudes Towards Work	.51	.29	.37	-					
IV. Decision-Making	.33	.25	.23	.51	-				
V. Job Requirements	.40	.26	.23	.45	.40	-			
VI. Nature of Jobs	.26	.17	.14	.33	.28	.41	-		
VII. Work Behavior	.35	.23	.19	.39	.44	.38	.35	-	
VIII. Job-Seeking	.33	.22	.20	.36	.36	.40	.49	.39	-

Grade 12 N = 239

I. Technology	-								
IIA. Self Esteem	.16	-							
IIB. Attitudes Towards School	.17	.22	-						
III. Attitudes Towards Work	.34	.25	.23	-					
IV. Decision-Making	.18	.18	.18	.31	-				
V. Job Requirements	.37	.14	.15	.34	.27	-			
VI. Nature of Jobs	.26	.10	.10	.24	.21	.51	-		
VII. Work Behavior	.12	.08	.07	.32	.17	.47	.42	-	
VIII. Job-Seeking	.22	.06	.11	.30	.16	.48	.44	.50	-

*Pearsonian Coefficients of Correlation

Memorandum for: JOE ROTH

cc: Kim Powers

Subject: Teachers' comments concerning the COB

Date: February 2, 1976

References: Project No. V361182
Grant No. OEG-0-73-5312

From: Deborah G. Bonnet

Following is a summary of teacher evaluations of the COB and a description of the relationship between teacher-reported group reading levels and group test scores.

Form 24

Administration time varied from 40 to 120 minutes.

Is the COB FORMAT appropriate for this group? Fourteen teachers responded "yes." One third-grade class had difficulty with the "agree-disagree" response scale.

Is the VOCABULARY of the COB appropriate for this group? All second and fourth-grade teachers said "yes," but half of the third-grade classes had difficulty with the vocabulary. However, this difficulty was mostly with career-related words such as politician, lathe, and horticulturist. One teacher reported difficulty with the word "compliment."

Are the CONCEPTS of the COB appropriate for this group? All second and fourth-grade teachers said "yes," but responses were evenly mixed for third-grade teachers. Only one teacher specified the children's difficulty, reporting that many students could not grasp the concept of a career, and could relate only to jobs of people they know.

At grade 3, two classes were reported as below average readers as a group, but their scores did not differ notably from those of average third-grade readers. All second and fourth-grade teachers considered their students average readers as a group.

Form 58

Administration time varied between 35 and 90 minutes, with most classes completing the battery in less than one hour.

Is the COB FORMAT appropriate for this group? One teacher reported difficulties with Part IV, where one question applies to 12 items. Another recommended that directions for Part V specify the best answer. Instructions for Part I also caused some confusion in one class.

Is the VOCABULARY of the COB appropriate for this group? Seventh and eighth grade teachers reported no problems, but about half of the fifth and sixth-grade classes had difficulty with vocabulary. Difficult words include inferior, leisure, technology, politician, and optometrist, but few teachers specified problem words.

Are the CONCEPTS of the COB appropriate for this group? Four fifth and sixth-grade teachers considered the concepts too advanced for these age groups. Comments were "Eleven year olds are a bit too young," "There are many important concepts on this test that should be taught, but I doubt they have been taught by sixth grade." "Many of these children never hear these concepts discussed at home."

At grade 5, reading level has no apparent relationship to average scores. There is some evidence that below-average sixth graders tend to score lower than those at or above grade level in reading on attitudes towards work and world of work. At grade seven, the class of average readers actually scored higher than the same teacher's above-average class on all scales except attitudes towards work and decision-making skills, where average scores were about the same for both groups.

Form 912

Administration time varied from 25 to 50 minutes.

All teachers found the format appropriate.

Vocabulary caused major problems only in ninth grade classes of below-average readers. Irrelevant, aggressive, inferior, interdependency, technological, and minority were specifically cited.

Concepts of the COB were considered appropriate by all but one teacher of an above-average twelfth-grade class, whose students found the test too easy and boring. (This observation was not supported by average scores in this class.)

Ninth grade below-average readers scored lower than other ninth graders on most scales, although the differences were very slight. Reading level appears to have no bearing on twelfth-graders' scores.

In summary the format of each form is acceptable, but teachers provided some valuable recommendations for improving any future versions of the COB.

There are a few vocabulary items, such as irrelevant, inferior, and leisure, which caused unanticipated difficulty. However, it seems that most unfamiliar words are career-related, such as optometrist, politician, and lathe. Since the COB is intended to measure familiarity with these terms, difficulties of this type on the pre-test present no problem.

Where teachers found the concepts of the COB inappropriate, explanatory comments indicated that whereas COB items reflect appropriate objectives for the grade level, children cannot be expected to have attained these objectives given their past experiences.

Although the method of investigating the effect of reading level on scores is admittedly quite gross, results are promising, indicating that the COB does not operate as a reading test, but rather measures student attributes which are independent of reading ability.

Memorandum for: JOE ROTH

Subject: Results of internal
consistench analyses
of COB scales.

Date: June 16, 1976

References: Project No. V361182
Grant No. OEG-0-73-5312

From: Deborah G. Bonnet

NED has recently completed analyses of the internal consistency of each scale of the experimental edition of the COB, used for assessment of student outcomes at CRP this year.

Point biserial item analyses show the correlation between responses to each item and the total score on each scale. These results will not be presented here since they cover reams of computer print-out. Suffice it to say that virtually all items show a statistically significant correlation with their respective scales and that in almost all cases, an item's correlation with its own scale exceeds its correlation with all other scales.

Kuder-Rechardson reliability coefficients were computed for each grade level on each scale. Those coefficients, shown below, were derived from testing at CRP in the fall of 1975. Results are somewhat disappointing, showing a rather low relationship among responses to items of a given scale. What this means for CRP is that the significant results obtained in the evaluation of student outcomes are likely to represent considerable student growth, but that the nature of that growth is not precisely defined by total scores. What it means for NED is that we have some work to do to revise the COB for use in the future.

KUDER-RICHARDSON
RELIABILITY COEFFICIENTS

Form 24 Scale	Grade 3 N = 283	Grade 4 N = 122
Technology	.84	.71
Self Esteem	.60	.59
Attitudes toward School	.80	.79
Attitudes toward Work	.44	.30
World of Work	.50	.43

Form 58 Scale	Grade 5 N = 90	Grade 6 N = 331	Grade 7 N = 55	Grade 8 N = 110
Technology	.31	.35	.45	.65
Self Esteem	.60	.66	.62	.75
Attitudes toward School	.75	.74	.75	.48
Attitudes toward Work	.59	.56	.45	.33
Decision-Making Skills	.36	.31	.16	.33
World of Work	.47	.58	.34	.74

Form 912 Scale	Grade 9 N = 188	Grade 12 N = 238
Technology	.57	.54
Self Esteem	.45	.39
Attitudes toward School	.62	.67
Attitudes toward Work	.62	.47
Decision-Making Skills	.31	.16
Job Requirements	.56	.72
Nature of Jobs	.50	.55
Work Behavior	.62	.51
Job-Seeking Skills	.68	.69